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>>> Enter BEGIN HOMEBASE for Dialog Announcements <<<
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      1:ERIC 1966-2003/Sep 11
File
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File 410:Chronolog(R) 1981-2003/Aug
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     $0.01 Estimated cost this search
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  File 5:Biosis Previews(R) 1969-2003/Sep W1
        (c) 2003 BIOSIS
  File 73:EMBASE 1974-2003/Sep W1
        (c) 2003 Elsevier Science B.V.
  File 155:MEDLINE(R) 1966-2003/Sep W1
         (c) format only 2003 The Dialog Corp.
*File 155: Medline has been reloaded and accession numbers have
changed. Please see HELP NEWS 155.
  File 399:CA SEARCH(R) 1967-2003/UD=13911
         (c) 2003 American Chemical Society
*File 399: Use is subject to the terms of your user/customer agreement.
Alert feature enhanced for multiple files, etc. See HELP ALERT.
      Set Items Description
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? e au=dumoutier
      Items Index-term
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        1 AU=DUMOUTHIER N.
E1
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            7356 TIF?
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 3/7/1
           (Item 1 from file: 5)
DIALOG(R) File 5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.
13862754
          BIOSIS NO.: 200200491575
Crystal structure of recombinant human interleukin-22.
AUTHOR: Nagem Ronaldo Alves Pinto; Colau Didier; Dumoutier Laure;
  Renauld Jean-Christophe; Ogata Craig; Polikarpov Igor(a
AUTHOR ADDRESS: (a) Laboratorio Nacional de Luz Sincrotron, Caixa Postal
  6192, CEP 13084-971, Campinas, SP**Brazil E-Mail:
  ipolikarpov@if.sc.usp.br
JOURNAL: Structure (Cambridge) 10 (8):p1051-1062 August, 2002
MEDIUM: print
ISSN: 0969-2126
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English
```

ABSTRACT: Interleukin-22 (IL-10-related T cell-derived inducible factor/IL-TIF/IL-22) is a novel cytokine belonging to the IL-10 family. Recombinant human IL-22 (hIL-22) was found to activate the signal transducers and activators of transcription factors 1 and 3 as well as acute phase reactants in several hepatoma cell lines, suggesting its involvement in the inflammatory response. The crystallographic structure of recombinant hIL-22 has been solved at 2.0 ANG resolution using the SIRAS method. Contrary to IL-10, the hIL-22 dimer does not present an interpenetration of the secondary-structure elements belonging to the two distinct polypeptide chains but results from interface interactions between monomers. Structural differences between these two cytokines, revealed by the crystallographic studies, clearly indicate that, while a homodimer of IL-10 is required for signaling, hIL-22 most probably interacts with its receptor as a monomer.

3/7/2 (Item 2 from file: 5) DIALOG(R) File 5:Biosis Previews(R) (c) 2003 BIOSIS. All rts. reserv. BIOSIS NO.: 200200398781 13769960 Viral and cellular interleukin-10 (IL-10)-related cytokines: From structures to functions. AUTHOR: Dumoutier Laure; Renauld Jean-Christophe (a AUTHOR ADDRESS: (a) Ludwig Institute for Cancer Research, Avenue Hippocrate, 74, UCL 74 59, B-1200, Brussels\*\*Belgium E-Mail: jean-christophe.renauld@bru.licr.org JOURNAL: European Cytokine Network 13 (1):p5-15 Jan.-March, 2002 MEDIUM: print ISSN: 1148-5493 DOCUMENT TYPE: Literature Review RECORD TYPE: Abstract

ABSTRACT: The anti-inflammatory and immunosuppressive activities of IL-10 have been extensively studied during the last 10 years. More recently a series of new cytokines, structurally related to IL-10, were described. This family includes mda-7, IL-19, IL-20, IL-TIF/IL-22, and AK155. Most of the biological functions of these cytokines remain to be unraveled but new data are coming out steadily. Although none of these "IL-10 homologs" mimics IL-10 activities, they are likely to be involved in inflammatory processes as well. mda-7, IL-19 and IL-20 form a subfamily within IL-10 homologs, based on conserved amino acid sequences, and on the use of shared receptor complexes. Functional studies have stressed the potential suppressing activity of mda-7 on tumor growth. As for IL-20, its overexpression in transgenic mice led to skin abnormalities, reminiscent of psoriatic lesions in humans. IL-TIF /IL-22 is a Th1 cytokine, and was shown to upregulate the acute phase reactant production by liver cells. Finally, for AK155, originally described as a gene induced upon T cell transformation by Herpes-virus saimiri, functional data are still lacking to determine its biological activities.

DIALOG(R)File 5:Biosis Previews(R)
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13611722 BIOSIS NO.: 200200240543
Isolated nucleic acid molecules which encode T cell
 inducible factors (TIFs), the proteins encoded, and uses

(Item 3 from file: 5)

LANGUAGE: English

3/7/3

therefor. JTHOR: **Dumoutier Laure**(a); Louhed Jamila; Renauld Jean-Christop

AUTHOR: **Dumoutier Laure**(a); Louhed Jamila; Renauld Jean-Christophe AUTHOR ADDRESS: (a)Brussels\*\*Belgium

JOURNAL: Official Gazette of the United States Patent and Trademark Office

Patents 1256 (3):pNo Pagination Mar. 19, 2002

MEDIUM: e-file ISSN: 0098-1133

DOCUMENT TYPE: Patent RECORD TYPE: Abstract LANGUAGE: English

ABSTRACT: The invention involves isolation of nucleic acid molecules, the expression of which are upregulated by interleukin-9. The amino acid sequences of the proteins which correspond to the nucleic acid molecules show some structural features of cytokines. In addition to the nucleic acid molecules and the proteins, various uses of the molecules are disclosed. The molecules are referred to as T cell inducible factors.

3/7/4 (Item 4 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.

13505673 BIOSIS NO.: 200200134494

Isolated nucleic acid molecules which encode T cell

inducible factors (TIFS), the proteins encoded, and uses thereof.

AUTHOR: Dumoutier Laure(a); Louhed Jamila; Renauld Jean-Christophe

AUTHOR ADDRESS: (a)Brussels\*\*Belgium

JOURNAL: Official Gazette of the United States Patent and Trademark Office

Patents 1253 (3):pNo Pagination Dec. 18, 2001

MEDIUM: e-file ISSN: 0098-1133

DOCUMENT TYPE: Patent RECORD TYPE: Abstract LANGUAGE: English

ABSTRACT: The invention involves isolation of nucleic acid molecules, the expression of which are upregulated by interleukin-9. The amino acid sequences of the proteins which correspond to the nucleic acid molecules show some structural features of cytokines. In addition to the nucleic acid molecules and the proteins, various uses of the molecules are disclosed. The molecules are referred to as T cell inducible factors.

3/7/5 (Item 5 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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12714780 BIOSIS NO.: 200000468282

IL-TIF induces acute phase reactant production by hepatocytes through IL-10Rbeta.

AUTHOR: Dumoutier L(a); Van Roost E(a); Colau D(a); Renauld J-C(a AUTHOR ADDRESS: (a)Brussels Branch, Ludwig Institute for Cancer Research, Brussels\*\*Belgium

JOURNAL: Immunology Letters 73 (2-3):p261 September, 2000

MEDIUM: print

CONFERENCE/MEETING: 24th European Immunology Meeting of the European Federation of Immunological Societies (EFIS) Poznan, Poland September 23-26, 2000

SPONSOR: European Federation of Immunological Societies

ISSN: 0165-2478

RECORD TYPE: Citation LANGUAGE: English

SUMMARY LANGUAGE: English

(Item 6 from file: 5) DIALOG(R)File 5:Biosis Previews(R) (c) 2003 BIOSIS. All rts. reserv.

BIOSIS NO.: 200000467485

Cloning and characterization of mouse and human TIF, a new IL-1-related cytokine.

AUTHOR: Dumoutier L(a); Ameye G(a); Michaux L(a); Renauld J-C(a

AUTHOR ADDRESS: (a) Ludwig Institute for Cancer Research, Brussels Branch,

Cliniques Univesitaires St-Luc, B-1200, Brussels\*\*Belgium

JOURNAL: Cytokine 11 (11):p969 Nov., 1999

MEDIUM: print

CONFERENCE/MEETING: Seventh Annual Conference of the International Cytokine

Society Hilton Head, South Carolina, USA December 5-9, 1999

SPONSOR: The International Cytokine Society

ISSN: 1043-4666 RECORD TYPE: Citation LANGUAGE: English SUMMARY LANGUAGE: English

(Item 7 from file: 5) 3/7/7 DIALOG(R) File 5:Biosis Previews(R) (c) 2003 BIOSIS. All rts. reserv.

12687035 BIOSIS NO.: 200000440537

Human interleukin-10-related T cell-derived inducible factor: Molecular cloning and functional characterization as an hepatocyte-stimulating

AUTHOR: Dumoutier Laure; Van Roost Emiel; Colau Didier; Renauld Jean-Christophe (a

AUTHOR ADDRESS: (a) Brussels Branch and Experimental Medicine Unit, Ludwig Institute for Cancer Research, Christian de Duve Institute of Cellular Pathology, Universite Catholique de Louvain, Avenue Hippocrate 74, B1200, Brussels\*\*Belgium

JOURNAL: Proceedings of the National Academy of Sciences of the United

States of America 97 (18):p10144-10149 August 29, 2000

MEDIUM: print ISSN: 0027-8424

DOCUMENT TYPE: Article RECORD TYPE: Abstract LANGUAGE: English

SUMMARY LANGUAGE: English

ABSTRACT: IL-10-related T cell-derived inducible factor (IL-TIF or IL-21) is a new cytokine structurally related to IL-10 and originally identified in the mouse as a gene induced by IL-9 in T cells and mast cells. Here, we report the cloning of the human IL-TIF cDNA, which shares 79% amino acid identity with mouse IL-TIF and 25% identity with human IL-10. Recombinant human IL-TIF was found to activate signal transducer and activator of transcription factors-1 and -3 in several hepatoma cell lines. IL-TIF stimulation of HepG2 human hepatoma cells up-regulated the production of acute phase reactants such as serum amyloid A, alpha1-antichymotrypsin, and haptoglobin. Although IL-10 and IL-TIF have distinct activities, antibodies directed against the beta chain of the IL-10 receptor blocked the induction of acute phase reactants by IL-TIF, indicating that this chain is a common component of the IL-10 and IL-TIF receptors. Similar acute phase reactant induction was observed in mouse liver upon IL-TIF injection, and IL-TIF expression was found to be rapidly increased after lipopolysaccharide (LPS) injection, suggesting that this cytokine contributes to the inflammatory response in vivo.

3/7/8 (Item 1 from file: 73)
DIALOG(R)File 73:EMBASE
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10608331 EMBASE No: 2000073611

Cloning and characterization of IL-10-related T cell-derived inducible factor (IL-TIF), a novel cytokine structurally related to IL-10 and inducible by IL-9

Dumoutier L.; Louahed J.; Renauld J.-C.

Dr. J.-C. Renauld, Ludwig Institute for Cancer Research, Avenue Hippocrate, 74, B-1200 Brussels Belgium

AUTHOR EMAIL: renauld@licr.ucl.ac.be

Journal of Immunology (J. IMMUNOL.) (United States) 15 FEB 2000, 164/4 (1814-1819)

CODEN: JOIMA ISSN: 0022-1767 DOCUMENT TYPE: Journal; Article

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

NUMBER OF REFERENCES: 23

IL-9 is a Th2 cytokine active on various cell types such as T and B lymphocytes, mast cells, and eosinophils, and potentially involved in allergy and asthma. To understand better the molecular mechanisms underlying the activity of this cytokine, we used a cDNA subtraction method to identify genes specifically induced by IL-9 in mouse T cells. One of the IL-9- regulated genes isolated by this approach turned out to encode a 180-amino acid long protein, including a potential signal peptide, and showing 22% amino acid identity with IL-10. This protein, designated IL-10-related T cell-derived inducible factor (IL-TIF), is induced by IL-9 in thymic lymphomas, T cells, and mast cells, and by lectins in freshly isolated splenocytes. Experiments concerning the mechanism regulating IL-TIF expression in T cells indicate that IL-9 induction is rapid (within 1 h), does not require protein synthesis, and depends on the activation of the Janus kinase (JAK)-STAT pathway. In vivo, constitutive expression of IL-TIF was detected by RT-PCR in thymus and brain, suggesting that the role of this new factor is not restricted to the immune system. Transfection of HEK293 cells with the IL-TIF cDNA resulted in the production of a glycosylated protein of about 25 kDa that was found to induce STAT activation in mesangial and neuronal cell lines. Further studies will have to address the possibility that some of the IL-9 activities may be mediated by IL-TIF.

3/7/9 (Item 1 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

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09508516 21286452 PMID: 11390453

Cloning and characterization of IL-22 binding protein, a natural antagonist of IL-10-related T cell-derived inducible factor/IL-22.

Dumoutier L; Lejeune D; Colau D; Renauld J C

Ludwig Institute for Cancer Research, Brussels Branch and the Experimental Medicine Unit, Christian de Duve Institute of Cellular Pathology, Universite de Louvain, Brussels, Belgium.

Journal of immunology (Baltimore, Md. - 1950) (United States) Jun 15 2001, 166 (12) p7090-5, ISSN 0022-1767 Journal Code: 2985117R

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM Record type: Completed

The class II cytokine receptor family includes the receptors for IFN-alphabeta, IFN-gamma, IL-10, and IL-10-related T cell-derived inducible factor/IL-22. By screening genomic DNA databases, we identified a gene

encoding a protein of 231 aa, showing 33 and 34% amino acid identity with the extracellular domains of the IL-22 receptor and of the IL-20R/cytokine receptor family 2-8, respectively, but lacking the transmembrane and cytoplasmic domains. A lower but significant sequence identity was found with other members of this family such as the IL-10R (29%), cytokine receptor family 2-4/IL-10Rbeta (30%), tissue factor (26%), and the four IFN receptor chains (23-25%). This gene is located on chromosome 6q24, at 35 kb from the IFNGR1 gene, and is expressed in various tissues with maximal expression in breast, lungs, and colon. The recombinant protein was found to bind IL-10-related T cell-derived inducible factor/IL-22, and to inhibit the activity of this cytokine on hepatocytes and intestinal epithelial cells. We propose to name this natural cytokine antagonist IL-22BP for IL-22 binding protein.

Record Date Created: 20010606 Record Date Completed: 20010823

3/7/10 (Item 2 from file: 155) DIALOG(R) File 155:MEDLINE(R)

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09312548 21069354 PMID: 11197690

IL-TIF /IL-22: genomic organization and mapping of the human and mouse genes.

Dumoutier L; Van Roost E; Ameye G; Michaux L; Renauld J C Ludwig Institute for Cancer Research, Brussels Branch, Experimental Medicine Unit, Christian de Duve Institute of Cellular Pathology, Brussels,

Belgium.

Genes and immunity (England) Dec 2000, 1 (8) p488-94, ISSN 1466-4879 Journal Code: 100953417

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM Record type: Completed

IL-TIF is a new cytokine originally identified as a gene induced by IL-9 in murine T lymphocytes, and showing 22% amino acid identity with IL-10. Here, we report the sequence and organization of the mouse and human genes, which both consist of 6 exons spreading over approximately 6 Kb. The IL-TIF gene is a single copy gene in humans, and is located on chromosome 12q15, at 90 Kb from the IFN gamma gene, and at 27 Kb from the AK155 gene, which codes for another IL-10-related cytokine. In the mouse, the IL-TIF gene is located on chromosome 10, also in the same region as the IFN gamma gene. Although it is a single copy gene in BALB/c and DBA/2 mice, the IL-TIF gene is duplicated in other strains such as C57Bl/6, FVB and 129. The two copies, which show 98% nucleotide identity in the coding region, were named IL-TIF alpha and IL-TIF beta. Beside single nucleotide variations, they differ by a 658 nucleotide deletion in IL-TIF beta, including the first non-coding exon and 603 nucleotides from the promoter. A DNA fragment corresponding to this deletion was sufficient to confer IL-9-regulated expression of a luciferase reporter plasmid, suggesting that the IL-TIF beta gene is either differentially regulated, or not expressed at all.

Record Date Created: 20010129
Record Date Completed: 20010426

3/7/11 (Item 1 from file: 399) DIALOG(R)File 399:CA SEARCH(R)

(c) 2003 American Chemical Society. All rts. reserv.

136274327 CA: 136(18)274327x PATENT
Protein and cDNA sequences of human soluble interleukin 22 binding protein and uses in drug screening

```
ASSIGNEE: Ludwig Institute for Cancer Research
  PATENT: PCT International; WO 200224912 A2 DATE: 20020328
  APPLICATION: WO 2001US29576 (20010921) *US PV234583 (20000922) *US
PV245495 (20001103) *US 919162 (20010731)
  PAGES: 42 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C12N-015/12A;
C12N-005/10B; C12N-005/20B; C12Q-001/68B; C07K-014/715B; C07K-016/18B; G01N-033/68B; G01N-033/53B; A61K-038/17B DESIGNATED COUNTRIES: AE; AL; AM;
AT; AU; AZ; BA; BB; BG; BR; BY; CA; CH; CN; CR; CU; CZ; DE; DK; DM; EE; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC;
LK; LR; LS; LT; LU; LV; MA; MD; MG; MK; MN; MW; MX; NO; NZ; PL; PT; RO; RU;
SD; SE; SG; SI; SK; SL; TJ; TM; TR; TT; TZ; UA; UG; US; UZ; VN; YU; ZA; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM DESIGNATED REGIONAL: GH; GM; KE; LS; MW
; MZ; SD; SL; SZ; TZ; UG; ZW; AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR;
IE; IT; LU; MC; NL; PT; SE; TR; BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW; ML;
MR; NE; SN; TD; TG
  SECTION:
CA203003 Biochemical Genetics
  IDENTIFIERS: human interleukin binding protein cDNA sequence
  DESCRIPTORS:
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    against interleukin 22 binding protein; protein and cDNA sequences of
    human sol. interleukin 22 binding protein and uses in drug screening
Hybridoma...
    cell; protein and cDNA sequences of human sol. interleukin 22 binding
    protein and uses in drug screening
Intestine...
    colon, tissue, interleukin 22 binding protein strongly expressed in;
    protein and cDNA sequences of human sol. interleukin 22 binding protein
    and uses in drug screening
Genetic vectors...
    expressing interleukin 22 binding protein; protein and cDNA sequences
    of human sol. interleukin 22 binding protein and uses in drug screening
Promoter(genetic element)...
    for expressing interleukin 22 binding protein; protein and cDNA
    sequences of human sol. interleukin 22 binding protein and uses in drug
    screening
Labels...
    for interleukin 22 binding protein; protein and cDNA sequences of human
    sol. interleukin 22 binding protein and uses in drug screening
Gene, animal...
    interleukin 22 binding protein; protein and cDNA sequences of human
    sol. interleukin 22 binding protein and uses in drug screening
    interleukin 22 binding; protein and cDNA sequences of human sol.
    interleukin 22 binding protein and uses in drug screening
Antibodies...
    monoclonal, against interleukin 22 binding protein; protein and cDNA
    sequences of human sol. interleukin 22 binding protein and uses in drug
    screening
Drug screening... cDNA sequences... Protein sequences... Human...
    protein and cDNA sequences of human sol. interleukin 22 binding protein
    and uses in drug screening
Mammary gland... Lung... Stomach...
    tissue, interleukin 22 binding protein strongly expressed in; protein
    and cDNA sequences of human sol. interleukin 22 binding protein and
    uses in drug screening
Animal cell line...
    transgenic; protein and cDNA sequences of human sol. interleukin 22
    binding protein and uses in drug screening
Interleukins...
    22, IL-TIF/IL-22, binding protein; protein and cDNA sequences of human
    sol. interleukin 22 binding protein and uses in drug screening
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INVENTOR (AUTHOR): Renauld, Jean-Christophe; Dumoutier, Laure

LOCATION: USA

CAS REGISTRY NUMBERS: 406152-12-3P 406152-15-6 amino acid sequence; protein and cDNA sequences of human sol. interleukin 22 binding protein and uses in drug screening 406152-11-2D 406152-14-5D subfragment is claimed, nucleotide sequence; protein and cDNA sequences of human sol. interleukin 22 binding protein and uses in drug screening 406152-42-9 406152-43-0 406152-44-1 406152-45-2 406152-46-3 406152-47-4 406152-48-5 unclaimed nucleotide sequence; protein and cDNA sequences of human sol. interleukin 22 binding protein and uses in drug screening 3/7/12 (Item 2 from file: 399) DIALOG(R) File 399:CA SEARCH(R) (c) 2003 American Chemical Society. All rts. reserv. 136246402 CA: 136(16)246402z PATENT Isolated nucleic acid molecules which encode T cell inducible factors (TIFs), the proteins encoded, and uses thereof in prepn. of antibodies and immunogens and in study of STAT activation and interleukin-9 effects INVENTOR (AUTHOR): Dumoutier, Laure; Louhed, Jamila; Renauld, Jean-Christophe LOCATION: USA ASSIGNEE: Ludwig Institute for Cancer Research PATENT: United States ; US 6359117 B1 DATE: 20020319 APPLICATION: US 354243 (19990716) \*US 178973 (19981026) PAGES: 23 pp., Cont.-in-part of U.S. Ser. No. 178,973. CODEN: USXXAM LANGUAGE: English CLASS: 530351000; C07K-014/52A SECTION: CA215005 Immunochemistry IDENTIFIERS: T cell inducible factor TIF cytokine interleukin 9 DESCRIPTORS: Animal cell line... A20; isolated nucleic acid mols. which encode T cell inducible factors (TIFs), proteins encoded, and uses thereof in prepn. of antibodies and immunogens and in study of STAT activation and interleukin Animal cell line... BCL-1; isolated nucleic acid mols. which encode T cell inducible factors (TIFs), proteins encoded, and uses thereof in prepn. of antibodies and immunogens and in study of STAT activation and interleuk Animal cell line...

BW5147; isolated nucleic acid mols. which encode T cell inducible factors (TIFs), proteins encoded, and uses thereof in prepn. of antibodies and immunogens and in study of STAT activation and interleu Animal cell line...

COS; isolated nucleic acid mols. which encode T cell inducible factors (TIFs), proteins encoded, and uses thereof in prepn. of antibodies and immunogens and in study of STAT activation and interleukin DNA...

genomic; isolated nucleic acid mols. which encode T cell inducible
factors (TIFs), proteins encoded, and uses thereof in prepn. of
antibodies and immunogens and in study of STAT activation and interle
T cell(lymphocyte)...

helper cell; isolated nucleic acid mols. which encode T cell inducible factors (TIFs), proteins encoded, and uses thereof in prepn. of antibodies and immunogens and in study of STAT activation and int Protein sequences...

homol.; isolated nucleic acid mols. which encode T cell inducible factors (TIFs), proteins encoded, and uses thereof in prepn. of antibodies and immunogens and in study of STAT activation and interleu Chromosome...

human 12, 12q15; isolated nucleic acid mols. which encode T cell inducible factors (TIFs), proteins encoded, and uses thereof in prepn. of antibodies and immunogens and in study of STAT activation and

Interleukin 9... Protein sequences... DNA sequences... Human... Mouse... Spleen... T cell(lymphocyte)... Mast cell... B cell(lymphocyte)... Interleukin 2... Interleukin 4... Liver... Kidney... Heart... Brain... Intestine... Thymus gland... Lung... Muscle... Bone marrow... cDNA... Antibodies...

isolated nucleic acid mols. which encode T cell inducible factors (TIFs), proteins encoded, and uses thereof in prepn. of antibodies and immunogens and in study of STAT activation and interleukin-9 ef Animal cell line...

LI38; isolated nucleic acid mols. which encode T cell inducible factors (TIFs), proteins encoded, and uses thereof in prepn. of antibodies and immunogens and in study of STAT activation and interleuki Animal cell line...

MC9; isolated nucleic acid mols. which encode T cell inducible factors (TIFs), proteins encoded, and uses thereof in prepn. of antibodies and immunogens and in study of STAT activation and interleukin

mesangium; isolated nucleic acid mols. which encode T cell inducible factors (TIFs), proteins encoded, and uses thereof in prepn. of antibodies and immunogens and in study of STAT activation and interve...

neuron; isolated nucleic acid mols. which encode T cell inducible factors (TIFs), proteins encoded, and uses thereof in prepn. of antibodies and immunogens and in study of STAT activation and interleu Transcription factors...

STAT1; isolated nucleic acid mols. which encode T cell inducible factors (TIFs), proteins encoded, and uses thereof in prepn. of antibodies and immunogens and in study of STAT activation and interleuk Transcription factors...

STAT3; isolated nucleic acid mols. which encode T cell inducible factors (TIFs), proteins encoded, and uses thereof in prepn. of antibodies and immunogens and in study of STAT activation and interleuk Transcription factors...

STAT5; isolated nucleic acid mols. which encode T cell inducible factors (TIFs), proteins encoded, and uses thereof in prepn. of antibodies and immunogens and in study of STAT activation and interleuk Cytokines...

TIF (T cell inducible factor); isolated nucleic acid mols. which encode T cell inducible factors (TIFs), proteins encoded, and uses thereof in prepn. of antibodies and immunogens and in study of STAT vtokines...

TIF.alpha. (T cell inducible factor .alpha.); isolated nucleic acid mols. which encode T cell inducible factors (TIFs), proteins encoded, and uses thereof in prepn. of antibodies and immunogens and intokines

TIF.beta. (T cell inducible factor .beta.); isolated nucleic acid mols. which encode T cell inducible factors (TIFs), proteins encoded, and uses thereof in prepn. of antibodies and immunogens and in s Animal cell line...

TS1; isolated nucleic acid mols. which encode T cell inducible factors (TIFs), proteins encoded, and uses thereof in prepn. of antibodies and immunogens and in study of STAT activation and interleukin Animal cell line...

TS2; isolated nucleic acid mols. which encode T cell inducible factors (TIFs), proteins encoded, and uses thereof in prepn. of antibodies and immunogens and in study of STAT activation and interleukin Animal cell line...

TS3; isolated nucleic acid mols. which encode T cell inducible factors (TIFs), proteins encoded, and uses thereof in prepn. of antibodies and immunogens and in study of STAT activation and interleukin Animal cell line...

TS6; isolated nucleic acid mols. which encode T cell inducible factors (TIFs), proteins encoded, and uses thereof in prepn. of antibodies and immunogens and in study of STAT activation and interleukin

Animal cell line... 293-EBNA; isolated nucleic acid mols. which encode T cell inducible factors (TIFs), proteins encoded, and uses thereof in prepn. of antibodies and immunogens and in study of STAT activation and interl Animal cell line... 70Z/3; isolated nucleic acid mols. which encode T cell inducible factors (TIFs), proteins encoded, and uses thereof in prepn. of antibodies and immunogens and in study of STAT activation and interleuk Animal cell line... 9T7; isolated nucleic acid mols. which encode T cell inducible factors (TIFs), proteins encoded, and uses thereof in prepn. of antibodies and immunogens and in study of STAT activation and interleukin CAS REGISTRY NUMBERS: 404323-42-8 404323-43-9 amino acid sequence; sequence characterization and function of 11028-71-0 isolated nucleic acid mols. which encode T cell inducible factors (TIFs), proteins encoded, and uses thereof in prepn. of antibodies and immunogens and in study of STAT activation and interleukin-9 effects 404326-59-6 404326-60-9 404326-61-0 404326-62-1 404326-63-2 unclaimed nucleotide sequence; isolated nucleic acid mols. which encode T cell inducible factors (TIFs), the proteins encoded, and uses thereof in prepn. of antibodies and immunogens and in study of STAT activation and interleukin-9 effects 3/7/13 (Item 3 from file: 399) DIALOG(R) File 399:CA SEARCH(R) (c) 2003 American Chemical Society. All rts. reserv. CA: 136(11)166068e 136166068 PATENT Human T cell inducible factors, interleukin-21, sequences, chromosomal mapping, and function studies INVENTOR(AUTHOR): Dumoutier, Laure; Renauld, Jean-Christophe LOCATION: USA ASSIGNEE: Ludwig Institute for Cancer Research PATENT: PCT International; WO 200210393 A2 DATE: 20020207 APPLICATION: WO 2001US20485 (20010627) \*US 626617 (20000727) PAGES: 64 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C12N-015/24A; C12N-015/63B; C07K-014/54B; G01N-033/50B DESIGNATED COUNTRIES: AU; BR; CA; CN; JP DESIGNATED REGIONAL: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE ; IT; LU; MC; NL; PT; SE; TR SECTION: CA215005 Immunochemistry IDENTIFIERS: sequence interleukin 21 gene human, transcription factor STAT induction IL21 human mouse, activation transcription interleukin 21 human DESCRIPTORS: Transcriptional regulation... activation; human T cell inducible factors, interleukin-21, sequences, chromosomal mapping, and function studies Proteins... acute-phase, induction of; human T cell inducible factors, interleukin-21, sequences, chromosomal mapping, and function studies Gene, animal... encoding IL-21; human T cell inducible factors, interleukin-21, sequences, chromosomal mapping, and function studies Thymus gland... Brain... expression of IL-21 in mouse; human T cell inducible factors, interleukin-21, sequences, chromosomal mapping, and function studies

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B cell(lymphocyte)...
    expression of IL-21 in; human T cell inducible factors, interleukin-21,
    sequences, chromosomal mapping, and function studies
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    helper cell, IL-9 upregulated Il-21 in; human T cell inducible factors,
    interleukin-21, sequences, chromosomal mapping, and function studies
    hepatocyte; human T cell inducible factors, interleukin-21, sequences,
    chromosomal mapping, and function studies
Liver, neoplasm...
    hepatoma, induction of STAT in; human T cell inducible factors,
    interleukin-21, sequences, chromosomal mapping, and function studies
Human... cDNA sequences... DNA sequences... Genetic mapping... Mammalia...
Drug screening... Mouse...
    human T cell inducible factors, interleukin-21, sequences, chromosomal
    mapping, and function studies
Chromosome...
    human 12, q15; human T cell inducible factors, interleukin-21,
    sequences, chromosomal mapping, and function studies
Mast cell...
    IL-9 upregulated Il-21 in; human T cell inducible factors,
    interleukin-21, sequences, chromosomal mapping, and function studies
Lipopolysaccharides...
    induction of IL-21 with; human T cell inducible factors,
    interleukin-21, sequences, chromosomal mapping, and function studies
Haptoglobin...
    induction of; human T cell inducible factors, interleukin-21,
    sequences, chromosomal mapping, and function studies
    mesangium, melanoam, induction of STAT in; human T cell inducible
    factors, interleukin-21, sequences, chromosomal mapping, and function
    studies
Nerve...
    neuron, melanoam, induction of STAT in; human T cell inducible factors,
    interleukin-21, sequences, chromosomal mapping, and function studies
Antibodies...
    of IL-10R.beta.; human T cell inducible factors, interleukin-21,
    sequences, chromosomal mapping, and function studies
Interleukin 10...
    R.beta.; human T cell inducible factors, interleukin-21, sequences,
    chromosomal mapping, and function studies
Proteins...
    SAA (serum amyloid A), induction of; human T cell inducible factors,
    interleukin-21, sequences, chromosomal mapping, and function studies
Transcription factors...
    STAT, induction of; human T cell inducible factors, interleukin-21,
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Interleukin 9...
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    interleukin-21, sequences, chromosomal mapping, and function studies
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    21.alpha.; human T cell inducible factors, interleukin-21, sequences,
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Interleukins...
    21.beta.; human T cell inducible factors, interleukin-21, sequences,
    chromosomal mapping, and function studies
Interleukins...
    21; human T cell inducible factors, interleukin-21, sequences,
    chromosomal mapping, and function studies
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          .alpha.1-chymotrypsin, induction of; human T cell inducible
9004-07-3
    factors, interleukin-21, sequences, chromosomal mapping, and function
    studies
394754-56-4 394754-57-5 nucleotide sequence; human T cell inducible
    factors, interleukin-21, sequences, chromosomal mapping, and function
    studies
394754-66-6 394754-67-7 394754-68-8 394754-69-9 394754-70-2
    394754-71-3 394754-72-4 394754-73-5 394754-74-6 394754-75-7
    394754-76-8 394754-77-9
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    394754-91-7 394754-92-8 394754-93-9 394754-94-0 394754-96-2 394754-97-3 394754-98-4 394754-99-5
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                                                         394755-02-3
    unclaimed nucleotide sequence; human T cell inducible factors,
    interleukin-21, sequences, chromosomal mapping, and function studies
394755-00-1 394755-01-2 394755-03-4 unclaimed protein sequence; human T
    cell inducible factors, interleukin-21, sequences, chromosomal mapping,
    and function studies
11028-71-0 upregulation of IL-2 with; human T cell inducible factors,
    interleukin-21, sequences, chromosomal mapping, and function studies
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S2
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           (Item 1 from file: 5)
 6/3/1
DIALOG(R)File
               5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.
           BIOSIS NO.: 200200240543
13611722
Isolated nucleic acid molecules which encode T cell
  inducible factors (TIFs), the proteins encoded, and uses
  therefor.
AUTHOR: Dumoutier Laure(a); Louhed Jamila; Renauld Jean-Christophe
AUTHOR ADDRESS: (a) Brussels ** Belgium
```

chromosomal mapping, and function studies

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JOURNAL: Official Gazette of the United States Patent and Trademark Office
Patents 1256 (3):pNo Pagination Mar. 19, 2002
MEDIUM: e-file
ISSN: 0098-1133
DOCUMENT TYPE: Patent
RECORD TYPE: Abstract
LANGUAGE: English
 6/3/2
           (Item 2 from file: 5)
DIALOG(R) File 5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.
13505673
           BIOSIS NO.: 200200134494
Isolated nucleic acid molecules which encode T cell
  inducible factors (TIFS), the proteins encoded, and uses
AUTHOR: Dumoutier Laure(a); Louhed Jamila; Renauld Jean-Christophe
AUTHOR ADDRESS: (a) Brussels**Belgium
JOURNAL: Official Gazette of the United States Patent and Trademark Office
Patents 1253 (3):pNo Pagination Dec. 18, 2001
MEDIUM: e-file
ISSN: 0098-1133
DOCUMENT TYPE: Patent
RECORD TYPE: Abstract
LANGUAGE: English
           (Item 1 from file: 399)
DIALOG(R) File 399:CA SEARCH(R)
(c) 2003 American Chemical Society. All rts. reserv.
               CA: 136(16)246402z
                                     PATENT
  Isolated nucleic acid molecules which encode T cell inducible factors
(TIFs), the proteins encoded, and uses thereof in prepn. of antibodies and
immunogens and in study of STAT activation and interleukin-9 effects
  INVENTOR (AUTHOR): Dumoutier, Laure; Louhed, Jamila; Renauld,
Jean-Christophe
  LOCATION: USA
  ASSIGNEE: Ludwig Institute for Cancer Research
  PATENT: United States ; US 6359117 B1 DATE: 20020319
  APPLICATION: US 354243 (19990716) *US 178973 (19981026)
  PAGES: 23 pp., Cont.-in-part of U.S. Ser. No. 178,973. CODEN: USXXAM
  LANGUAGE: English CLASS: 530351000; C07K-014/52A
           (Item 2 from file: 399)
DIALOG(R) File 399:CA SEARCH(R)
(c) 2003 American Chemical Society. All rts. reserv.
  136182472
              CA: 136(12)182472n
                                     PATENT
  Soluble zcytor 11 cytokine receptors
  INVENTOR (AUTHOR): Kindsvogel, Wayne R.; Topouzis, Stavros
  LOCATION: USA
  ASSIGNEE: Zymogenetics, Inc.
  PATENT: PCT International; WO 200212345 A2 DATE: 20020214
  APPLICATION: WO 2001US24838 (20010808) *US PV223827 (20000808) *US
PV250876 (20001201)
  PAGES: 117 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C07K-014/705A
  DESIGNATED COUNTRIES: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; BZ;
CA; CH; CN; CO; CR; CU; CZ; DE; DK; DM; DZ; EC; EE; ES; FI; GB; GD; GE; GH;
GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU;
LV; MA; MD; MG; MK; MN; MW; MX; MZ; NO; NZ; PL; PT; RO; RU; SD; SE; SG; SI;
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SK; SL; TJ; TM; TR; TT; TZ; UA; UG; UZ; VN; YU; ZA; ZW; AM; AZ; BY; KG; KZ;

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MD; RU; TJ; TM DESIGNATED REGIONAL: GH; GM; KE; LS; MW; MZ; SD; SL; SZ; TZ
; UG; ZW; AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LU; MC; NL;
PT; SE; TR; BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW; ML; MR; NE; SN; TD; TG
           (Item 3 from file: 399)
DIALOG(R) File 399:CA SEARCH(R)
(c) 2003 American Chemical Society. All rts. reserv.
               CA: 136(11)166068e
                                     PATENT
  Human T cell inducible factors, interleukin-21, sequences, chromosomal
mapping, and function studies
  INVENTOR (AUTHOR): Dumoutier, Laure; Renauld, Jean-Christophe
  LOCATION: USA
  ASSIGNEE: Ludwig Institute for Cancer Research
  PATENT: PCT International; WO 200210393 A2 DATE: 20020207
  APPLICATION: WO 2001US20485 (20010627) *US 626617 (20000727)
  PAGES: 64 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C12N-015/24A;
C12N-015/63B; C07K-014/54B; G01N-033/50B DESIGNATED COUNTRIES: AU; BR; CA;
CN; JP DESIGNATED REGIONAL: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE
; IT; LU; MC; NL; PT; SE; TR
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              13 RD S9 (unique items)
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            (Item 1 from file: 5)
 10/3/1
DIALOG(R)File
              5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.
11478406
           BIOSIS NO.: 199800259738
The observation on treatment effects of local adoptive immunotherapy in 33
  cases with head and neck cancer.
AUTHOR: Han Demin; Zhu Xiaonong; Huang Zhigang; et al
AUTHOR ADDRESS: Beijing Inst. Otolaryngol., Beijing 100005**China
JOURNAL: Zhonghua Zhongliu Zazhi 19 (6):p454-456 Nov., 1997
ISSN: 0253-3758
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: Chinese; Non-English
SUMMARY LANGUAGE: Chinese; English
 10/3/2
            (Item 2 from file: 5)
DIALOG(R) File
               5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.
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BIOSIS NO.: 199698603640

Spontaneous and glucocorticoid-induced apoptosis in human mature T

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lymphocytes.
AUTHOR: Burnetti Mauro(a); Martelli Nicola; Colasante Antonella; Piantelli
  Mauro; Musiani Piero; Aiello Francesca B
AUTHOR ADDRESS: (a) Lab. Immunopathol., Consorzio Mario Negri Sud, 66030
  Santa Maria Imbaro**Italy
JOURNAL: Blood 86 (11):p4199-4205 1995
ISSN: 0006-4971
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English
 10/3/3
            (Item 3 from file: 5)
DIALOG(R) File 5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.
           BIOSIS NO.: 199598517136
10062218
T-cell suppression and selective in vivo activation of TH2 subpopulation by
  the Entamoeba histolytica 220-kilodalton lectin.
AUTHOR: Talamas-Rohana Patricia(a); Schlie-Guzman Maria Adelina;
  Hernandez-Ramirez Veronica I; Rosales-Encina Jose Luis
AUTHOR ADDRESS: (a) Dep. Patologia Experimental, Centro Investigacion
  Estudios Avanzados IPN, Apdo. Postal 14-740, M**Mexico
JOURNAL: Infection and Immunity 63 (10):p3953-3958 1995
ISSN: 0019-9567
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English
 10/3/4
            (Item 4 from file: 5)
DIALOG(R) File 5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.
         BIOSIS NO.: 199395029811
Effects of lipopolysaccharide on interleukin-2-induced cytotoxic activity
  of murine splenocyte cultures: Role of prostaglandin E-2 and interferons.
AUTHOR: Vaillier Dominique(a); Daculsi Richard; Gualde Norbert
AUTHOR ADDRESS: (a) URA 1456 CNRS, Univ. de Bordeaux, 146 rue Leo-Saignat,
  33076 Bordeaux Cedex**France
JOURNAL: Cancer Immunology Immunotherapy 35 (6):p395-400 1992
ISSN: 0340-7004
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English
 10/3/5
            (Item 5 from file: 5)
DIALOG(R)File
              5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.
08355994
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RENAL TUBULAR EPITHELIAL ANTIGEN-CONTAINING IMMUNE COMPLEXES STIMULATE
  INTERLEUKIN-1 PRODUCTION BY MONOCYTES FROM PATIENTS WITH
  GLOMERULONEPHRITIS
AUTHOR: MATSUMOTO K
AUTHOR ADDRESS: SECOND DEP. INTERNAL MED., NIHON UNIV. SCH. MED., TOKYO,
JOURNAL: INT UROL NEPHROL 24 (3). 1992. 319-326. 1992
FULL JOURNAL NAME: International Urology and Nephrology
CODEN: IURNA
RECORD TYPE: Abstract
LANGUAGE: ENGLISH
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(Item 6 from file: 5)
DIALOG(R)File
               5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.
07845233
          BIOSIS NO.: 000092115399
INTRAVENOUS VITAMINS FOR VERY-LOW-BIRTH-WEIGHT INFANTS
AUTHOR: GREENE H L; SMITH R; POLLACK P; MURRELL J; CAUDILL M; SWIFT L
AUTHOR ADDRESS: VANDERBILT UNIV. MED. CENT., DEP. PEDIATRICS, DIV.
  NUTRITION, D-4130 MEDICAL CENT. NORTH, NASHVILLE, TENN. 37232-2576.
JOURNAL: J AM COLL NUTR 10 (4). 1991. 281-288. 1991
FULL JOURNAL NAME: Journal of the American College of Nutrition
CODEN: JONUD
RECORD TYPE: Abstract
LANGUAGE: ENGLISH
 10/3/7
          (Item 7 from file: 5)
DIALOG(R)File
              5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.
07751133
          BIOSIS NO.: 000092064854
DISSOCIATION BETWEEN EARLY AND LATE EVENTS IN T CELL ACTIVATION MEDIATED
  THROUGH CD28 SURFACE MOLECULE
AUTHOR: NUNES J; BAGNASCO M; LOPEZ M; LIPCEY C; MAWAS C; OLIVE D
AUTHOR ADDRESS: UNITE CANCEROL. ET THERAPEUTIUE EXP., U.119, INSERM, 27
  BLVD. LEI ROURE, 13009 MARSEILLE, FRANCE.
JOURNAL: MOL IMMUNOL 28 (4-5). 1991. 427-436. 1991
FULL JOURNAL NAME: Molecular Immunology
CODEN: MOIMD
RECORD TYPE: Abstract
LANGUAGE: ENGLISH
 10/3/8
           (Item 8 from file: 5)
DIALOG(R) File 5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.
07343136
          BIOSIS NO.: 000090123038
ELEVATION OF CYCLIC AMP LEVELS INDEPENDENTLY DOWN REGULATES IL-1 IL-2 AND
  IL-2 RECEPTOR CD25 SYNTHESES
AUTHOR: IWAZ J; KOUASSI E; LAFONT S; REVILLARD J P
AUTHOR ADDRESS: LAB. IMMUNOL., INSERM U.80, CNRS UA 1177, UCBL, HOP. E.
  HERRIOT, 69437 LYON CEDEX 03, FRANCE.
JOURNAL: INT J IMMUNOPHARMACOL 12 (6). 1990. 631-638. 1990
FULL JOURNAL NAME: International Journal of Immunopharmacology
CODEN: IJIMD
RECORD TYPE: Abstract
LANGUAGE: ENGLISH
10/3/9
           (Item 9 from file: 5)
DIALOG(R) File
              5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.
07236207
         BIOSIS NO.: 000090016081
NUCLEAR EVENTS AFTER ACTIVATION OF CD4-POSITIVE-8-POSITIVE THYMOCYTES
AUTHOR: RIEGEL J S; RICHIE E R; ALLISON J P
AUTHOR ADDRESS: DEP. MICROBIOL. IMMUNOL., UNIV. CALIFORNIA BERKELEY,
  BERKELEY, CALIF. 94720.
JOURNAL: J IMMUNOL 144 (9). 1990. 3611-3618. 1990
FULL JOURNAL NAME: Journal of Immunology
CODEN: JOIMA
RECORD TYPE: Abstract
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10/3/10 (Item 10 from file: 5) DIALOG(R)File 5:Biosis Previews(R) (c) 2003 BIOSIS. All rts. reserv. 04596611 BIOSIS NO.: 000079009648 MEAT PRODUCTION AND CARCASS INDICATORS OF INTENSIVELY FATTENED LAMBS OF SOME BREEDS RAISED IN SOUTH BULGARIA 2 AUTHOR: IVANOV I S; DIMITROV I AUTHOR ADDRESS: INST. CATTLE SHEEP BREED., STARA ZAGORA, BULG. JOURNAL: ZHIVOTNOV'D NAUKI 21 (1). 1984. 35-41. 1984 FULL JOURNAL NAME: Zhivotnov'Dni Nauki CODEN: ZHVNA RECORD TYPE: Abstract LANGUAGE: BULGARIAN 10/3/11 (Item 11 from file: 5) DIALOG(R)File 5:Biosis Previews(R) (c) 2003 BIOSIS. All rts. reserv. 03524616 BIOSIS NO.: 000073027696 EFFECTS OF NITRATE LEVEL ON NITROGEN METABOLISM IN WINGED BEAN PSOPHOCARPUS-TETRAGONOLOBUS AND SOYBEAN GLYCINE-MAX AUTHOR: HILDEBRAND D F; HARPER J E; HYMOWITZ T AUTHOR ADDRESS: DEP. AGRONOMY, UNIV. ILLINOIS, URBANA, ILL. 61801. JOURNAL: ANN BOT (LOND) 48 (3). 1981. 307-314. 1981 FULL JOURNAL NAME: Annals of Botany (London) CODEN: ANBOA RECORD TYPE: Abstract LANGUAGE: ENGLISH 10/3/12 (Item 1 from file: 155) DIALOG(R) File 155: MEDLINE(R) (c) format only 2003 The Dialog Corp. All rts. reserv. 01181170 72026870 PMID: 5000317 [Notes on the round table discussion of the clinical studies of penthrane held at Santa Vittoria d'Alba on 21 June 1970 by the Associazione Anestesisti Rianimatori Ospedalieri Piemontesi] Atti della tavola rotonda su aggiornamenti clinici sul pentrane svoltasi Vittoria d'Alba **il** giugno 1970 a cura Santa 21 dell'Associazione Anestesisti Rianimatori Ospedalieri Piemontesi. Minerva anestesiologica (ITALY) Jun-Jul 1971, 37 (6) p257-88, ISSN 0375-9393 Journal Code: 0375272 Document type: Journal Article Languages: ITALIAN Main Citation Owner: NLM Record type: Completed 10/3/13 (Item 2 from file: 155) DIALOG(R) File 155: MEDLINE(R) (c) format only 2003 The Dialog Corp. All rts. reserv. 00207354 67160619 PMID: 5229075 [Report on the activity of the Study Center during the academic year 1964-65 compiled on Oct. 21, 1965] Relazione sull'attivita del Centro Studi durante l'anno accademico 1964-65 esposta **il 21-**10-1965. Palazzi S

Rassegna trimestrale di odontoiatria (ITALY) Jul-Sep 1966, 47

(3) p259-76, ISSN 0033-9911 Journal Code: 20020625R

Document type: Journal Article

Languages: ITALIAN

Main Citation Owner: NLM Record type: Completed

? t s10/7/all

10/7/1 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.

11478406 BIOSIS NO.: 199800259738

The observation on treatment effects of local adoptive immunotherapy in 33 cases with head and neck cancer.

AUTHOR: Han Demin; Zhu Xiaonong; Huang Zhigang; et al AUTHOR ADDRESS: Beijing Inst. Otolaryngol., Beijing 100005\*\*China JOURNAL: Zhonghua Zhongliu Zazhi 19 (6):p454-456 Nov., 1997 ISSN: 0253-3758

DOCUMENT TYPE: Article RECORD TYPE: Abstract

LANGUAGE: Chinese; Non-English SUMMARY LANGUAGE: Chinese; English

ABSTRACT: Objective: To evaluate treatment effects of local adoptive immunotherapy in 33 cases with head and neck cancer. Methods: IL-21 X 105 apprx 2 X 108 per day was injected into tumor for 10 days; during the 4th-8th day LAK cells 1.0 X 108-5.0 X 108 per day were combined with IL-2 injection. Then we analysed clinical effect, immunopathology, side effects, etc. Results: CR was seen in 1 case; PR in 6, MR in 20 cases, and SD in 6 cases. The one-, two-and three-year survival rate was 96.3%, 83.3% or 75.0% respectively. The results of histopathology showed that there were large amount of T lymphocytes (CD3+/4+) infiltrating in the tumor area after immunotherapy. No serious side effects were found during the course of the treatment. Conclusion: Local injection of IL-2/LAK can be used as immunotherapy for head and neck cancer.

10/7/2 (Item 2 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.

10148722 BIOSIS NO.: 199698603640

Spontaneous and glucocorticoid-induced apoptosis in human mature T lymphocytes.

AUTHOR: Burnetti Mauro(a); Martelli Nicola; Colasante Antonella; Piantelli Mauro; Musiani Piero; Aiello Francesca B

AUTHOR ADDRESS: (a) Lab. Immunopathol., Consorzio Mario Negri Sud, 66030 Santa Maria Imbaro\*\*Italy

JOURNAL: Blood 86 (11):p4199-4205 1995

ISSN: 0006-4971

DOCUMENT TYPE: Article RECORD TYPE: Abstract LANGUAGE: English

ABSTRACT: Glucocorticoid (GC)-induced apoptosis is a well-recognized physiologic regulator of murine T-cell number and function. We have analyzed its mechanisms in human mature T cells, which have been thought to be insensitive until recently. Peripheral blood T cells showed sensitivity to GC-induced apoptosis soon after the proliferative response to a mitogenic stimulation, and were also sensitive to spontaneous (ie, growth factor deprivation-dependent) apoptosis. CD8+ T cells were more sensitive to both forms than CD4+ T cells. Acquisition of sensitivity to

GC-induced apoptosis was not associated with any change in number or affinity of GC receptors. Both spontaneous and GC-induced apoptosis were increased by the macromolecular synthesis inhibitors, cycloheximide (CHX) and puromycin. A positive correlation between the degree of protein synthesis inhibition and the extent of apoptosis was observed. Interleukin-2 (IL-21 IL-4, and IL-10 protected (IL-2 gt IL-10 gt IL-4) T cells from both forms of apoptosis in a dose-dependent manner. Our data suggest that spontaneous and GC-induced apoptosis regulate the human mature T-cell repertoire by acting early after the immune response and differentially affecting T-cell subsets.

10/7/3 (Item 3 from file: 5) DIALOG(R) File 5:Biosis Previews(R) (c) 2003 BIOSIS. All rts. reserv. 10062218 BIOSIS NO.: 199598517136 T-cell suppression and selective in vivo activation of TH2 subpopulation by the Entamoeba histolytica 220-kilodalton lectin. AUTHOR: Talamas-Rohana Patricia(a); Schlie-Guzman Maria Adelina; Hernandez-Ramirez Veronica I; Rosales-Encina Jose Luis AUTHOR ADDRESS: (a) Dep. Patologia Experimental, Centro Investigacion Estudios Avanzados IPN, Apdo. Postal 14-740, M\*\*Mexico JOURNAL: Infection and Immunity 63 (10):p3953-3958 1995 ISSN: 0019-9567 DOCUMENT TYPE: Article RECORD TYPE: Abstract LANGUAGE: English

ABSTRACT: A 220-kDa surface protein (L220) with lectin activity from Entamoeba histolytica trophozoites has been characterized previously (J. L. Rosales-Encina, 1. Meza, A. Lopez-de-Leon, P. Talamas-Rohana, and M. Rojkind, J. Infect. Dis. 156:790-797, 1987). This molecule is involved in the adhesion process (I. Meza, F. Cazares, J. L. Rosales-Encina, P. Talamas-Rohana, and M. Rojkind, J. Infect. Dis. 156:798-805, 1987) and is very immunogenic. In this work, we studied both the humoral and the cellular immune responses to L220. We compared L220 with L220-derived components, such as a fusion peptide (M-11) and chemically obtained peptides (by treating the 220-kDa molecule with N-chlorosuccinimide-urea). Spleen cells from L220-immunized mice were unable to proliferate in vitro when stimulated with the protein. However, a proliferative response was obtained when mice were immunized with the L220-derived fusion peptide or the cleaved lectin. To find out if there was a correlation between the observed responses and TH1 or TH2 activation, we analyzed patterns of cytokine secretion (interleukin-2 ( IL-21, IL-4, IL-10, and gamma interferon). Cells from mice immunized with peptides that induced cell proliferation (100, 80, and 47 kDa) with the peptides (P lt 0.01) and with the intact molecule secreted IL-2 and gamma interferon, shoving a TH1-subset pattern. Conversely, cells from mice immunized with the intact 220-kDa molecule secreted IL-4 and IL-10, typical of a TH2 subpopulation; however, antibodies from each group recognized the 220-kDa molecule as determined by Western blotting (immunoblotting). These results suggest that various epitopes in the 220-kDa molecule generate different response patterns, suppressing or activating T-cell responses.

10/7/4 (Item 4 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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08740460 BIOSIS NO.: 199395029811
Effects of lipopolysaccharide on interleukin-2-induced cytotoxic activity of murine splenocyte cultures: Role of prostaglandin E-2 and interferons.

AUTHOR: Vaillier Dominique(a); Daculsi Richard; Gualde Norbert

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33076 Bordeaux Cedex\*\*France

JOURNAL: Cancer Immunology Immunotherapy 35 (6):p395-400 1992

ISSN: 0340-7004

DOCUMENT TYPE: Article RECORD TYPE: Abstract LANGUAGE: English

ABSTRACT: Splenocytes cultured for 24 h in the presence of interleukin-2 (IL-2), lipopolysaccharide (LPS) or both together expressed a cytotoxic activity against the YAC-1 lymphoma cell line and to a lesser extent against P815 mastocytoma cells. The association of IL-2 and LPS had an additive effect on induction of cytotoxicity. The IL-2-induced cytotoxic activity loasted for the whole of the culture; however, the addition of LPS at the initiation of the culture increased the cytotoxic activity during its early phase, the increment being followed by a fall of lytic activity after 72 h of culture. Assessment of interferon (IFN) in the culture supernatant showed (a) a production of IFN-gamma by Il-2-supplemented cultures, (b) a more potent IFN production by cultures treated with IL-3 plus LPS (including 20% IFN-alpha/beta), (c) and that indomethacin (1-mu-M) potentiated the effect of either IL-2 or LPS used alone but did not significantly increase the cytotoxic activity of cultures treated with IL-21 plus LPS (the one that produced a high level of IFN). When cultuers were treated by an anti-IFN antibody we observed no change in the cytotoxic activity; however, in the presence of anti-IFN-alpha/beta serum the cytotoxic activity of cultures treated with IL-2 plus LPS was inhibited after 24 h but stimulated after 72 h. When cultures treated with IL-2 plus LPS were supplemented with both indomethacin and anti-IFN-alpha/beta the cytotoxic activity assessed after 72 h of culture was maintained at the same level as that of IL-2-treated cultures, hence the fall after 72 h of the cytotoxicity of culture initiated in the presence of LPS alone was affected by both the immune serum and the cyclooxygenase inhibitor. Altogether these data show that when splenocytes are cultured for more than 72 h in the presence of IL-2 and LPS their cytotoxic activity decreases, and it is likely that this diminution is linked to the endogenous production of prostaglandin E-2 and IFN-alpha/beta.

10/7/5 (Item 5 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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08355994 BIOSIS NO.: 000094096517

RENAL TUBULAR EPITHELIAL ANTIGEN-CONTAINING IMMUNE COMPLEXES STIMULATE INTERLEUKIN-1 PRODUCTION BY MONOCYTES FROM PATIENTS WITH GLOMERULONEPHRITIS

AUTHOR: MATSUMOTO K

AUTHOR ADDRESS: SECOND DEP. INTERNAL MED., NIHON UNIV. SCH. MED., TOKYO, JPN.

JOURNAL: INT UROL NEPHROL 24 (3). 1992. 319-326. 1992 FULL JOURNAL NAME: International Urology and Nephrology

CODEN: IURNA

RECORD TYPE: Abstract LANGUAGE: ENGLISH

ABSTRACT: We have investigated the effect of immune complexes (IC) derived from human renal tubular epithelial (RTE) antigen on the release of interleukin-1 (IL-1) in monocyte cultures from patients with glomerulonephritis (GN). When peripheral blood monocytes (PBM) were activated by IC, substantial amounts of IL-1 could be detected in the supernatants as measured by mouse thymocyte assay. The IC-induced IL-1 activity was significantly higher in patients with GN than in normal

controls. To avoid the effect of prostaglandins on the IL-1 assay, we cultured PBM with addition of indomethacin and assayed IL-1 activity in the culture supernatants. This cyclooxgenase inhibitor augmented IC-induced IL-21 production. The results suggest that IC are involved in stimulating IL-1 production by PBM and thus play a role in the immune response in GN.

10/7/6 (Item 6 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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07845233 BIOSIS NO.: 000092115399
INTRAVENOUS VITAMINS FOR VERY-LOW-BIRTH-WEIGHT INFANTS
AUTHOR: GREENE H L; SMITH R; POLLACK P; MURRELL J; CAUDILL M; SWIFT L
AUTHOR ADDRESS: VANDERBILT UNIV. MED. CENT., DEP. PEDIATRICS, DIV.
NUTRITION, D-4130 MEDICAL CENT. NORTH, NASHVILLE, TENN. 37232-2576.
JOURNAL: J AM COLL NUTR 10 (4). 1991. 281-288. 1991
FULL JOURNAL NAME: Journal of the American College of Nutrition

CODEN: JONUD

RECORD TYPE: Abstract LANGUAGE: ENGLISH

ABSTRACT: Term infants and children appear to adapt to large variations in vitamin intakes. This is supported by the finding of similar blood levels of vitamins despite several-fold differences in intake on a body weight basis. By contrast, the finding of marked elevation of some vitamins and low levels of others seen in very-low-weight (VLBW) infants (< 1500 g) suggest that this group has less adaptive capacity to high- or low-dose intake. This indicates that their vitamin intakes need to be more closely aligned with actual needs. This paper reviews previously published data on vitamins A, E, B2, and B6 from VLBW infants receiving total parenteral nutrition (TPN). Vitamin A, VLBW infants are relatively deficient in retinol (R) at birth. During TPN large losses of R onto the delivery sets results in a further decline in stores of R as reflected in a progressive decline in plasma R during TPN. Because of the reported lower incidence of bronchopulmonary dysplasia associated with intramuscular vitamin A treatment, alternative methods of vitamin A delivery during TPN have been suggested. First, the vitamins were mixed with Intralipid (IL) and, second, retinyl palmitate (RP) rather than R was used. There was little in vitro loss of R when mixed with IL, and in vivo treatment resulted in higher blood levels after 1 month of retinol administration of IL than seen previously (21.4 .+-. 4.2 vs 14.1 .+-. 3.7 .mu.g/dl). Use of RP in VLBW infants resulted in high RP levels (40 .+-. 6 .mu.g/dl), although R levels were similar to that seen with R added to IL (21.1 .+-.  $4 \cdot mu.g/dl$ ). Using thwese data and those from other publications, currently suggested intravenous intake of vitamin A as R is 500 .mu.g/kg/day. Vitamin E. The TPN solution for pediatric patients contains .alpha.-tocopherol acetate. Little of the vitamin is lost to the plastic infusion sets. Infusion of four different dosage levels suggests that doses of 2.8-3.5 mg/kg/day will maintain most infant blood levels between 1 and 2 mg/dl. Vitamin B2. Vitamin B2 is activated to its active cofactor forms flavin mononucleotide (FMN) an flavin adenine dinucleotide (FAD). Three doses of riboflavin (0.68, 0.56, and 0.34 mg/kg/day) resulted in elevated blood levels. Using these blood response doses, a projected intake of 0.15 mg/kg/day) appears more appropriate to maintain blood levels in the range of those seen in formula-fed term infants. Vitamin B6. Vitamin B6 is converted in vivo to pyridoxal and activated to its cofactor form, pyridoxal phosphate (PLP). Three doses of pyridoxine (from 0.2 to 0.5 mg/kg/day) resulted in elevated blood levels. Using the blood response to these doses, an intake of 0.18 mg/kg/day is projected to maintain PLP levels within the range of that seen in plasma samples from formula-fed term infants.

10/7/7 (Item 7 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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07751133 BIOSIS NO.: 000092064854
DISSOCIATION BETWEEN EARLY AND LATE EVENTS IN T CELL ACTIVATION MEDIATED THROUGH CD28 SURFACE MOLECULE

AUTHOR: NUNES J; BAGNASCO M; LOPEZ M; LIPCEY C; MAWAS C; OLIVE D AUTHOR ADDRESS: UNITE CANCEROL. ET THERAPEUTIUE EXP., U.119, INSERM, 27 BLVD. LEI ROURE, 13009 MARSEILLE, FRANCE.

JOURNAL: MOL IMMUNOL 28 (4-5). 1991. 427-436. 1991

FULL JOURNAL NAME: Molecular Immunology

CODEN: MOIMD

RECORD TYPE: Abstract LANGUAGE: ENGLISH

ABSTRACT: The regulation of early and late events of T cell activation via the CD28 molecule has been investigated, using as an indicator system the differentiated leukemic T cell line Jurkat. Both CD3 and CD28 mAbs induced an increase in (Ca2+)i in Jurkat cells, although with different kinetics, the latter being slower than the former. CD28-mediated (Cd2+)i mobilization was highly sensitive to cholera toxin (ID50 25 ng/ml, vs 300 ng/ml for CD3 stimulation). The inhibitory action of cholera toxin was neither merely due to the increase in intracellular cAMP concentrations, nor to decrease in cell surface expression of the CD28 molecule. To evaluate the effects of cholera toxin on late events of Jurkat cell activation induced by CD28 and CD3 mAbs, the action of cholera toxin and cAMP and CD3- and CD28-mediated IL-2 secretion was analyzed. CD3-induced IL-2 secretion was highly sensitive to cholera toxin (ID < 5 ng/ml); on the other hand. CD28-induced Il-21 secretion was poorly sensitive to cholera toxin, in sharp contrast to (CA2+)i mobilization. On the basis of these data, it is hypothesized that the CD28 pathway could be associated with at least two distinct transduction mechanisms, one responsible for the (Ca2+)i rise in Jurkat cells and highly sensitive to cholera toxin, and the other, whose second messenger in unknown, resistant to cholera toxin and responsible for IL-2 secretion.

10/7/8 (Item 8 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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07343136 BIOSIS NO.: 000090123038

ELEVATION OF CYCLIC AMP LEVELS INDEPENDENTLY DOWN REGULATES IL-1 IL-2 AND IL-2 RECEPTOR CD25 SYNTHESES

AUTHOR: IWAZ J; KOUASSI E; LAFONT S; REVILLARD J P

AUTHOR ADDRESS: LAB. IMMUNOL., INSERM U.80, CNRS UA 1177, UCBL, HOP. E. HERRIOT, 69437 LYON CEDEX 03, FRANCE.

JOURNAL: INT J IMMUNOPHARMACOL 12 (6). 1990. 631-638. 1990 FULL JOURNAL NAME: International Journal of Immunopharmacology

CODEN: IJIMD

RECORD TYPE: Abstract LANGUAGE: ENGLISH

ABSTRACT: In view of the central involvement of interleukin-1 (IL-1) in T-cell functions and the negative effects exerted by cyclic adenosine monophosphate (cAMP) on T-cell responses, we wondered whether these inhibitions rely on defects in IL-1 generation. We investigated the effect of a known cAMP elevating agent, cholera toxin (CT), on the generation of IL-1 from peripheral blood adherent cells as well as the role of IL-1 whenever IL-2 synthesis and IL-2 receptor (CD25 antigen) expression are inhibited. While augmenting intracellular cAMP concentration, CT inhibits from 20 to 40% the generation of IL-1 activity

from Escherichia coli lipopolysaccharide (LPS)-stimulated adherent cells. Theophylline (TH), a cAMP degradation blocking agent, induces the same decrease in IL-1 activity. The B chain of CT, devoid of cAMP activating potency, is not inhibitory. In systems where CT and TH dramatically inhibit the generation of IL-2 activity (80%), addition of exogenous IL-1 does not restore the ability of T-cells to produce or release IL-2. Moreover, CT- and dibutyryl (db)cAMP-induced inhibition of CD25 antigen expression is not overcome by exogenous IL-1, IL-21, nor by both interleukin. It is concluded that inhibition of IL-1 and IL-2 production are independent and that inhibition of CD25 antigen expression is independent of IL-1 and IL-2 modulation. Cholera toxin and cAMP influences on interleukin synthesis are discussed.

10/7/9 (Item 9 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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LANGUAGE: ENGLISH

07236207 BIOSIS NO.: 000090016081

NUCLEAR EVENTS AFTER ACTIVATION OF CD4-POSITIVE-8-POSITIVE THYMOCYTES AUTHOR: RIEGEL J S; RICHIE E R; ALLISON J P

AUTHOR ADDRESS: DEP. MICROBIOL. IMMUNOL., UNIV. CALIFORNIA BERKELEY, BERKELEY, CALIF. 94720.

JOURNAL: J IMMUNOL 144 (9). 1990. 3611-3618. 1990

FULL JOURNAL NAME: Journal of Immunology

CODEN: JOIMA

RECORD TYPE: Abstract

ABSTRACT: Functionally mature T cells respond to stimulation via the Aq receptor by secretion of Il-2 and/or other lymphokines and by proliferation. However, immature CD4+8+ thymocytes do not secrete IL-2 or proliferate in response to stimulation. We have analyzed murine thymocyte populations enriched for CD4+ and CD4+8+ cells as well as the functionally mature CD4+ lymphoma C6VL-B and the CD4+8+ lymphoma 1010 for their ability to express mRNA related to early products of T cell activation signals. When stimulated with the calcium ionophore (Ionomycin) plus PMA, all the cells, regardless of their phenotype, accumulated abundant levels of c-myc mRNA. However, in contrast to the CD4+ thymocytes and C6VL-B, which accumulated abundant levels of IL -21 transcripts, neither the normal CD4+8+ thymocytes nor 1010 expressed IL-2 mRNA before or after stimulation. We have also examined these cells for the presence of the murine equivalents of two nuclear DNA-binding factors, NFAT-1 and NFIL-2-A, which have been shown to be involved in IL-2 gene expression in human T cells. Our results indicate: 1) NFIL-2A binding activity is constitutively expressed in both CD4+ and CD4+8+ thymocytes and lymphomas and 2) NFAT-1 binding activity is readily detected in CD4+ thymocytes and C6VL-B, but is detected in very minimal

amounts in populations enriched for CD4+8+ thymocytes and in 1010 upon activation. These results suggest that the failure of CD4+8+ thymocytes to express IL-2 mRNA upon stimulation may be in part due to the lack of inducibility of NFAT-1 binding activity, and that functional maturation of this population might be associated with acquisition of the ability to

10/7/10 (Item 10 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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induce NFAT-1 activity.

04596611 BIOSIS NO.: 000079009648
MEAT PRODUCTION AND CARCASS INDICATORS OF INTENSIVELY FATTENED LAMBS OF SOME BREEDS RAISED IN SOUTH BULGARIA 2
AUTHOR: IVANOV I S; DIMITROV I

AUTHOR ADDRESS: INST. CATTLE SHEEP BREED., STARA ZAGORA, BULG.

JOURNAL: ZHIVOTNOV'D NAUKI 21 (1). 1984. 35-41. 1984

FULL JOURNAL NAME: Zhivotnov'Dni Nauki

CODEN: ZHVNA

RECORD TYPE: Abstract LANGUAGE: BULGARIAN

ABSTRACT: A scientific-economic experiment was carried out in 1980 at the Cattle and Sheep Breeding Research Institute in Stara Zagora with 90 lambs of the following breeds: Ile de France, semi-fine fleece, crossbred type lambs from Kazanluk region and Tsigai lambs from Topolovgrad region. There were 30 male lambs in each group, analogically equalized as regards age, type of lambing and live weight. Lambs were included in the experiment after reaching an age of 35-37 days and were fattened during a period of 80-105 days. At reaching live weights of 25, 30, 35 and 40 kg, 6 lambs from each group or a total of 24 lambs from each group were slaughtered in order to establish the quantitative and carcass indicators. Feed efficiency per kilogram of gain declines with age and increase in live weight, the rate of declining for Ile de France and Tsigai lambs being considerably higher reaching a live weight of 30 kg. The lambs of studied breeds reach the prescribed live weights at different ages. With the increase of live weight this difference between Il de France lambs on the one side and semi-fine fleece and Tsigai type lambs on the other increases from 6-7 days to Il-21 days. Ile de France lambs are distinguished by highest carcass yield and percentage of meat in carcass at all 4 live weights. Tsigai type lambs accumulate greatest quantity of meat at 25-30 kg live weight and semi-fine fleece lambs at 35-40 kg live weight. As live weight increases, the percentage content of protein in the absolute dry matter decreases from 86.34% to 67.35% but the percent content of fat increases and reaches maximum values at 35-40 kg live weight.

10/7/11 (Item 11 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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03524616 BIOSIS NO.: 000073027696
EFFECTS OF NITRATE LEVEL ON NITROGEN METABOLISM IN WINGED BEAN PSOPHOCARPUS-TETRAGONOLOBUS AND SOYBEAN GLYCINE-MAX AUTHOR: HILDEBRAND D F; HARPER J E; HYMOWITZ T AUTHOR ADDRESS: DEP. AGRONOMY, UNIV. ILLINOIS, URBANA, ILL. 61801. JOURNAL: ANN BOT (LOND) 48 (3). 1981. 307-314. 1981
FULL JOURNAL NAME: Annals of Botany (London)

CODEN: ANBOA

RECORD TYPE: Abstract LANGUAGE: ENGLISH

ABSTRACT: The effects of high (15 mM) and low (0.75 mM) solution nitrate levels on N metabolism in 3 genotypes (IL 7A, IL 13 and IL 21 ) of winged beans [P. tetragonolobus (L.) DC.] and 1 genotype (Williams) of soybean [G. max (L.) Merrill] were investigated. Plants were grown for 42 days in a greenhouse in solution culture prior to sampling. The 15 mM nitrate treatment resulted in greater growth of all plant parts except roots. Growth of soybeans was more responsive to nitrate level than was growth of winged beans. The high nitrate level inhibited nodulation in all plants. The IL 13 and IL 21 winged bean genotypes had similar nitrogenase activity (acetylene reduction per plant) as the soybean and IL 7A winged bean genotype had lower activity. The IL 13 winged bean genotype had higher nitrogenase activity (acetylene reduction [N2 fixation] per unit nodule mass) than the other 3 genotypes which all had similar activity. The 15 mM solution nitrate level stimulated leaf and root nitrate reductase (NR) activity for all plants. All winged bean genotypes had higher leaf NR activity and higher percentage reduced- and

nitrate-N contents of leaves and stems compared with soybeans. Total protein (reduced N) was greater in soybeans when sampled indicating that more nitrate had been metabolized by soybeans than by winged beans during the 42-day growth period.

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10/7/12
             (Item 1 from file: 155)
DIALOG(R) File 155:MEDLINE(R)
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          72026870
                     PMID: 5000317
  [Notes on the round table discussion of the clinical studies of penthrane
held at Santa Vittoria d'Alba on 21 June 1970 by the Associazione
Anestesisti Rianimatori Ospedalieri Piemontesi]
  Atti della tavola rotonda su aggiornamenti clinici sul pentrane svoltasi
    Santa
           Vittoria
                      d'Alba
                               il 21
                                        giugno 1970 a cura
dell'Associazione Anestesisti Rianimatori Ospedalieri Piemontesi.
  Minerva anestesiologica (ITALY)
                                   Jun-Jul 1971, 37 (6) p257-88,
                Journal Code: 0375272
ISSN 0375-9393
  Document type: Journal Article
  Languages: ITALIAN
  Main Citation Owner: NLM
  Record type: Completed
  Record Date Created: 19720104
  Record Date Completed: 19720104
 10/7/13
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DIALOG(R) File 155: MEDLINE(R)
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00207354
           67160619
                     PMID: 5229075
  [Report on the activity of the Study Center during the academic year
1964-65 compiled on Oct. 21, 1965]
  Relazione sull'attivita del Centro Studi durante l'anno accademico
1964-65 esposta il 21-10-1965.
  Palazzi S
  Rassegna trimestrale di odontoiatria (ITALY)
                                                    Jul-Sep 1966,
                                                                   47
 (3) p259-76, ISSN 0033-9911
                                Journal Code: 20020625R
  Document type: Journal Article
  Languages: ITALIAN
  Main Citation Owner: NLM
  Record type: Completed
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     S11
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...examined 50 records
                       (50)
...examined 50 records (100)
...completed examining records
             75 RD S11 (unique items)
     S12
? s interleukin(w)21(20n)(nucleic or dna)
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                 21
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         2312539
                 DNA
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             10 RD S13 (unique items)
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14/7/1 (Item 1 from file: 155) DIALOG(R)File 155:MEDLINE(R)

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15342527 22768159 PMID: 12885940

Cytokine requirements for the growth and development of mouse NK cells in vitro.

Toomey Jennifer A; Gays Frances; Foster Don; Brooks Colin G

School of Cell and Molecular Biosciences, The Medical School, Newcastle, United Kingdom.

Journal of leukocyte biology (United States) Aug 2003, 74 (2) p233-42, ISSN 0741-5400 Journal Code: 8405628

Document type: Journal Article

Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

Natural killer (NK) cells arise from immature progenitors present in fetal tissues and adult bone marrow, but the factors responsible for driving the proliferation and differentiation of these progenitors are poorly understood. Mouse NK cells had previously been thought not to express interleukin (IL)-2Ralpha chains, but we show here that immature and mature mouse NK cells express IL-2Ralpha chain mRNA and that low levels of IL-2Ralpha chains can be detected on the surface of immature and mature NK cells provided they are cultured in the absence of IL-2. Despite their potential expression of high-affinity IL-2 receptors, immature NK cells only proliferate if IL-2 is present at extremely high concentrations. Surprisingly, IL-15 can also only support the growth of immature NK cells at high, presumably nonphysiological concentrations. Although NK cells express mRNA for the high-affinity IL-15Ralpha chain, they also express a variety of alternately spliced transcripts whose protein products could potentially disrupt signaling through IL-15 receptors. The requirement for high concentrations of IL-2 and IL-15 suggests that if these cytokines play any role in the proliferative expansion of NK cells in vivo, they act indirectly via other cells or in cooperation with other factors. In support of the latter possibility, we report that the recently described cytokine IL-21 can markedly enhance the proliferation of immature (and mature) NK cells in the presence of doses of IL-2 and IL-15 that by themselves have little growth-promoting activity.

Record Date Created: 20030729
Record Date Completed: 20030909

14/7/2 (Item 2 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

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13966694 22233738 PMID: 12297282

Antitumor activity of interleukin-21 prepared by novel refolding procedure from inclusion bodies expressed in Escherichia coli.

Asano Ryutaro; Kudo Toshio; Makabe Koki; Tsumoto Kouhei; Kumagai Izumi; et al

Cell Resource Center for Biomedical Research, Institute of Development, Aging, and Cancer, Tohoku University, 4-1 Seiryomachi, Aoba-ku, Sendai 980-8575, Japan.

FEBS letters (Netherlands) Sep 25 2002, 528 (1-3) p70-6, ISSN 0014-5793 Journal Code: 0155157

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM Record type: Completed

Interleukin-21 (IL-21) has recently been identified as a novel 4-helix-bundle type I cytokine possessing a cytokine receptor gamma chain essential for the immune response. We report the preparation and functional

characterization of Escherichia coli-expressed recombinant human IL-21 (rIL-21). The rIL-21, expressed as insoluble inclusion bodies in E. coli, was solubilized and then refolded by using a modified dialysis method. The introduction of redox reagents during refolding led to a dramatic increase in the refolding efficiency. Circular dichroism spectrum analysis showed that the refolded rIL-21 had an alpha-helix as a secondary structure, which is a characteristic of type I cytokines. Flow cytometry confirmed previous reports that rIL-21 binds to CD3-activated T cells (T-LAK) and to cell lines Raji, HL60, and Jurkat. rIL-21 stimulated the proliferation of T-LAK but not peripheral blood mononuclear cells, and this effect seems to be identical to that of co-stimulation with anti-CD3 antibody. Growth inhibition assay indicated that enhancement of the cytotoxicity of T-LAK to the human bile duct carcinoma TFK-1 depended on the concentration of rIL-21. Thus, refolded rIL-21 had activity identical to that of authentic IL-21 and enhanced the anti-tumor activity of T-LAK. These conclusions suggest the potential use of the refolded cytokine in adoptive immunotherapy using T-LAK cells and in the discovery of other functions of the cytokine.

Record Date Created: 20020925 Record Date Completed: 20021104

14/7/3 (Item 3 from file: 155) DIALOG(R) File 155: MEDLINE(R)

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10043842 21981751 PMID: 11986233

Interleukin-21 is a growth and survival factor for human myeloma cells. Brenne Anne-Tove; Baade Ro Torstein; Waage Anders; Sundan Anders; Borset Magne; Hjorth-Hansen Henrik

Department of Cancer Research and Molecular Biology, Norwegian University of Science and Technology, Trondheim, Norway.

Blood (United States) May 15 2002, 99 (10) p3756-62, ISSN 0006-4971 Journal Code: 7603509

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM Record type: Completed

Interleukin-21 (IL-21) is a recently cloned cytokine with homology to -2, IL-4, and IL-15. In this study we examined the effects of IL-21 on human myeloma cells. We found that IL-21 induced proliferation and inhibited apoptosis of the IL-6-dependent human myeloma cell lines ANBL-6, IH-1, and OH-2. The potency of IL-21 was close to that of IL-6 in the OH-2 cell line. Neutralizing antibodies to IL-6 or the IL-6 receptor transducer chain (gp130) did not affect IL-21-induced DNA synthesis, indicating that IL-21-induced proliferation was not mediated through these proteins. Tumor factor (TNF), another stimulator of myeloma cell growth, up-regulated the expression level of IL-21 receptor (IL-21R), and combinations of TNF and IL-21 gave synergistic effects on myeloma cell proliferation. Furthermore, 4 of 9 purified samples of primary myeloma cells showed a significant increase in DNA synthesis on stimulation of the cells by IL-21. By Western blot analysis, we demonstrated that the intracellular signaling pathways of IL-21 in myeloma cells involved phosphorylation of Jak1, Stat3, and Erk1/2 (p44/42 mitogen-activated protein kinase). IL-21 is a novel growth and survival factor in multiple myeloma and may represent a target for future therapy.

Record Date Created: 20020502 Record Date Completed: 20020610

(Item 4 from file: 155) DIALOG(R) File 155: MEDLINE(R)

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09865354 21679750 PMID: 11821949

The gene for interleukin-21 receptor is the partner of BCL6 in t(3;16)(q27;p11), which is recurrently observed in diffuse large B-cell lymphoma.

Ueda Chiyoko; Akasaka Takashi; Kurata Masayuki; Maesako Yoshitomo; Nishikori Momoko; Ichinohasama Ryo; Imada Kazunori; Uchiyama Takashi; Ohno

First Division, Department of Internal Medicine, Faculty of Medicine, Kyoto University, 54 Shogoin-Kawaramachi, Sakyo-ku, Kyoto 606-8507, Japan. Oncogene (England) Jan 17 2002, 21 (3) p368-76, ISSN 0950-9232 Journal Code: 8711562

Document type: Journal Article

Languages: ENGLISH Main Citation Owner: NLM Record type: Completed

BCL6 translocation affecting the chromosomal band 3q27 can involve a number of non-immunoglobulin (non-IG) gene loci as partners. We report here that the gene for interleukin-21 receptor (IL-21R) is the partner of BCL6 in t(3;16)(q27;p11) translocation. The two breakpoints on 16p11 of a lymphoma cell line YM and case no. 1012 with diffuse large B-cell lymphoma, both of which carried t(3;16), were localized within the 27-kb intron 1 of IL-21R. As a result of t(3;16), the promoter region of IL-21R was substituted for the regulatory sequences of BCL6 in the same transcriptional orientation. Reverse transcriptase-mediated polymerase chain reaction revealed chimeric mRNA consisting of two non-coding exons 1a/1b of IL-21R and coding exons of BCL6 in both lymphoma cells. Fluorescence in situ chromosomal hybridization of YM metaphase cells revealed fusion signals that contained both the BCL6 and IL-21R sequences on the der(3)t(3;16) chromosome. IL-21R was actively transcribed in YM cells, while BCL6 that was under the control of the IL-21R promoter was only moderately expressed at the mRNA and protein level. We constructed expression plasmid of BCL6 that followed the promoter sequences of IL-21R. COS-7 cells transiently transfected with the plasmid expressed high level Bcl-6 protein and displayed nuclear staining with a characteristic punctate pattern by immunofluorescence, indicating that expression of BCL6 can be enhanced by t(3;16). This study added to the list of non-IG partners of BCL6 translocations a new class of gene, i.e. cytokine receptor gene, the expression of which is closely associated with lymphoid cells.

Record Date Created: 20020131 Record Date Completed: 20020214

14/7/5 (Item 5 from file: 155) DIALOG(R) File 155: MEDLINE(R)

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09531754 21311845 PMID: 11418623

Cutting edge: the common gamma-chain is an indispensable subunit of the IL-21 receptor complex.

Asao H; Okuyama C; Kumaki S; Ishii N; Tsuchiya S; Foster D; Sugamura K Department of Microbiology and Immunology, Tohoku University Graduate School of Medicine, Sendai, Japan. asao-h@mail.cc.tohoku.ac.jp

Journal of immunology (Baltimore, Md. - 1950) (United States) 2001, 167 (1) p1-5, ISSN 0022-1767 Document type: Journal Article Journal Code: 2985117R

Languages: ENGLISH

Main Citation Owner: NLM Record type: Completed

The common gamma-chain (gamma(c)) is an indispensable subunit of the functional receptor complexes for IL-4, IL-7, IL-9, and IL-15 as well as IL-2. Here we show that the gamma(c) is also shared with the IL-21R complex. Although IL-21 binds to the IL-21R expressed on gamma(c)-deficient ED40515(-) cells, IL-21 is unable to transduce any intracytoplasmic signals. However, in EDgamma-16 cells, a gamma(c)-transfected ED40515(-) cell line, IL-21 binds to the IL-21R and can activate Janus kinase (JAK)1, JAK3, STAT1, and STAT3. The chemical cross-linking study reveals the direct binding of IL-21 to the gamma(c). These data clearly demonstrate that the gamma(c) is an indispensable subunit of the functional IL-21R complex. Record Date Created: 20010621 Record Date Completed: 20010920 14/7/6 (Item 6 from file: 155) DIALOG(R)File 155:MEDLINE(R) (c) format only 2003 The Dialog Corp. All rts. reserv. 21169212 PMID: 11267886 Cytokines: IL-21 joins the gamma(c)-dependent network? Vosshenrich C A; Di Santo J P Unite des Cytokines et Developpement Lymphoide, Institut Pasteur, 25 rue du Dr Roux, 75742, Paris, France. vosshenr@pasteur.fr Current biology - CB (England) Mar 6 2001, 11 (5) pR175-7, ISSN Journal Code: 9107782 0960-9822 Document type: Journal Article Languages: ENGLISH Main Citation Owner: NLM Record type: Completed discovery of the cytokine IL-21 adds another member to the ever-growing list of small secreted molecules that have potent effects on lymphoid cells. Initial characterization of the IL-21 receptor complex suggests that IL-21 may belong to the cytokine family whose receptors share the common gamma chain, gamma(c).
Record Date Created: 20010327 Record Date Completed: 20010628 (Item 1 from file: 399) 14/7/7 DIALOG(R) File 399:CA SEARCH(R) (c) 2003 American Chemical Society. All rts. reserv. 139035100 CA: 139(3)35100y PATENT Methods and compositions for modulating interleukin-21 (IL-21) or IL-21 receptor (IL-21R) activity and therapeutic uses INVENTOR(AUTHOR): Carter, Laura; Carreno, Beatriz; Lowe, Leslie D.; Whitters, Matthew J.; Dunussi, Kyri; Collins, Mary; Ma, Margery; Young, Deborah A.; Witek, Joann S.; Larsen, Glenn; Kasaian, Marion T.; Donaldson, Debra D.; Unger, Michelle LOCATION: USA ASSIGNEE: Wyeth, John, and Brother Ltd. PATENT: U.S. Pat. Appl. Publ. ; US 20030108549 A1 DATE: 20030612 APPLICATION: US 264634 (20021004) \*US 40005 (19980317) \*US 560766 (20000428) \*US 569384 (20000511) \*US 972218 (20011004) \*US PV373746 (20020417)PAGES: 109 pp., Cont.-in-part of U.S. Ser. No. 972,218. CODEN: USXXCO LANGUAGE: English CLASS: 424145100; A61K-039/395A; A61K-031/525B; A61K-031/4745B; A61K-031/415B SECTION: CA215005 Immunochemistry CA201XXX Pharmacology CA203XXX Biochemical Genetics CA263XXX Pharmaceuticals IDENTIFIERS: interleukin 21 receptor agonist antagonist immunosuppressant immunostimulant, autoimmune disease cancer infection soluble IL21 receptor agonist antagonist DESCRIPTORS:

adjuvants; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and

Immunostimulants...

infections

Interleukin 12... Interleukin 15... Interleukin 17... Interleukin 18...
Tumor necrosis factors...

agonists and antagonists; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Spinal column, disease...

ankylosing spondylitis; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Antibodies...

anti-IL-21R; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

CD22 (antigen) ... CD4 (antigen) ...

antibodies; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Cytotoxic agents...

antimetabolites; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Dermatitis...

atopic; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections Thyroid gland, disease...

autoimmune thyroiditis; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Estrogen receptors...

.beta. agonist; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Drug delivery systems...

carriers; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections Antibodies...

chimeric; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections Intestine, disease...

Crohn's; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections B cell(lymphocyte)...

depletion; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Lymphocyte...

effector cell; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Protein motifs...

extracellular domain; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

cDNA sequences...

for IL-21 receptor from human and mouse; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Immunoglobulins...

fragments, anti-IL-21R; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Immunoglobulins...

fragments; interleukin-21 receptor agonists and antagonists for

treating transplant rejection, autoimmune diseases, cancers and infections

Immunoglobulins...

G; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections Immunoglobulins...

G1; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections Immunoglobulins...

G2; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections Antibodies...

humanized; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Mouse...

IL-21R/MU-1 from; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Disease, animal...

immune cell-assocd.; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Drug delivery systems...

immunoconjugates; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Neoplasm...

immunotherapy; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Drug delivery systems...

immunotoxins; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Parasite...

infection by; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Intestine, disease...

inflammatory; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Cytokines... Enzymes, biological studies...

inhibitors; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Diabetes mellitus...

insulin-dependent; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Interleukin receptors...

interleukin-21, MU-1; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Allergy... Animal tissue culture... Antimicrobial agents... Antitumor agents... Anti-inflammatory agents... Arthritis... Asthma... Autoimmune disease... B cell(lymphocyte)... CD4-positive T cell... CD8-positive T cell... Cytotoxic agents... Dermatitis... DNA sequences... Drug delivery systems... Drugs... Eczema... Fusion proteins(chimeric proteins)... Genetic vectors... Growth inhibitors, animal... Human... Immunoglobulin receptors... Immunoglobulins... Immunostimulants... Immunosuppressants... Immunotherapy ... Leukemia... Lymphocyte... Lymphoma... Macrophage... Megakaryocyte... Molecular cloning... Multiple sclerosis... Myasthenia gravis...

Osteoarthritis... Protein sequences... Psoriasis... Radionuclides... Rheumatoid arthritis... T cell(lymphocyte)... Toxins... Transplant rejection... Vaccines...

interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections Rheumatoid arthritis...

juvenile; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections T cell(lymphocyte)...

memory; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections Antibodies...

monoclonal; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Lymphocyte...

natural killer cell; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Antibodies...

neutralizing; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Transcription factors...

NF-.kappa.B (nuclear factor of .kappa. light chain gene enhancer in B-cells), inhibitors; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cance

Anti-inflammatory agents...

nonsteroidal; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Selectins...

P-, inhibitors; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Glycoproteins...

PSGL-1 (P-selectin glycoprotein ligand-1), inhibitors; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Arthritis...

psoriatic arthritis; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Proteins...

p38, inhibitors; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Tumor necrosis factor receptors...

p55 and p75; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Connective tissue, disease...

scleroderma; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Molecules...

small; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections Animal tissue, disease...

soft, neoplasm; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Neoplasm...

solid; interleukin-21 receptor agonists and antagonists for treating

transplant rejection, autoimmune diseases, cancers and infections Lupus erythematosus...

systemic; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections Infection...

therapy; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections Vaccines...

tumor; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections Antigens...

tumor-assocd.; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Antigens...

tumor-assocd., RAGE; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Antitumor agents...

vaccines; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections Blood vessel, disease...

vasculitis; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Infection...

viral; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections CAS REGISTRY NUMBERS:

- 542817-54-9P 542817-58-3P amino acid sequence; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections
- 9001-84-7 329900-75-6 inhibitors; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections
- 59-05-2 53123-88-9 75706-12-6 83869-56-1 140281-74-9 162635-04-3 interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections
- 542817-53-8P nucleotide sequence; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections
- 542817-52-7DP 542817-56-1DP subfragments are claimed, amino acid sequence; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections
- 542817-51-6DP 542817-55-0DP 542817-57-2DP subfragments are claimed, nucleotide sequence; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections
- 542820-51-9 542820-52-0 542820-53-1 542820-55-3 542820-56-4 542820-57-5 542820-58-6 542820-59-7 542820-60-0 542820-62-2 542820-64-4 542820-66-6 542820-68-8 542820-70-2 542820-72-4 542820-74-6 542820-76-8 542820-78-0 542820-79-1 542820-80-4 unclaimed nucleotide sequence; methods and compns. for modulating interleukin-21 (IL-21) or IL-21 receptor (IL-21R) activity and therapeutic uses
- 542820-50-8 542820-54-2 542820-61-1 542820-63-3 542820-65-5 542820-67-7 542820-69-9 542820-71-3 542820-73-5 542820-75-7 542820-77-9 unclaimed protein sequence; methods and compns. for modulating interleukin-21 (IL-21) or IL-21 receptor (IL-21R) activity and therapeutic uses
- 138831-86-4 219312-69-3 434283-61-1 510729-85-8 unclaimed sequence; methods and compns. for modulating interleukin-21 (IL-21) or IL-21 receptor (IL-21R) activity and therapeutic uses

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(Item 2 from file: 399)
DIALOG(R) File 399:CA SEARCH(R)
(c) 2003 American Chemical Society. All rts. reserv.
  138302654
               CA: 138(20)302654p
                                     PATENT
  Interleukin-21 receptor agonists and antagonists for treating transplant
rejection, autoimmune diseases, cancers and infections
  INVENTOR(AUTHOR): Carter, Laura; Whitters, Matthew J.; Collins, Mary;
Young, Deborah A.; Larsen, Glenn; Donaldson, Debra D.; Lowe, Leslie D.;
Dunussi, Kyri; Ma, Margery; Witek, Joann S.; Kasaian, Marion T.; Ungar,
Michelle
  LOCATION: USA
  ASSIGNEE: Wyeth, John, and Brother Ltd.
  PATENT: PCT International; WO 200328630 A2 DATE: 20030410
  APPLICATION: WO 2002US29839 (20021004) *US 972218 (20011004) *US PV373746
(20020417)
  PAGES: 176 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: A61K-000/A
  DESIGNATED COUNTRIES: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; BZ;
CA; CH; CN; CO; CR; CU; CZ; DE; DK; DM; DZ; EC; EE; ES; FI; GB; GD; GE; GH;
GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU;
LV; MA; MD; MG; MK; MN; MW; MX; MZ; NO; NZ; OM; PH; PL; PT; RO; RU; SD; SE;
SG; SI; SK; SL; TJ; TM; TN; TR; TT; TZ; UA; UG; US; UZ; VC; VN; YU; ZA; ZM;
ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM DESIGNATED REGIONAL: GH; GM; KE; LS
; MW; MZ; SD; SL; SZ; TZ; UG; ZM; ZW; AT; BE; BG; CH; CY; CZ; DE; DK; EE;
ES; FI; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE; SK; TR; BF; BJ; CF; CG; CI;
CM; GA; GN; GQ; GW; ML; MR; NE; SN; TD; TG
  SECTION:
CA215005 Immunochemistry
CA201XXX Pharmacology
CA203XXX Biochemical Genetics
CA263XXX Pharmaceuticals
  IDENTIFIERS: interleukin 21 receptor agonist antagonist immunosuppressant
immunostimulant transplant rejection, autoimmune disease cancer infection
soluble IL21 receptor agonist antagonist
  DESCRIPTORS:
Immunostimulants...
    adjuvants; interleukin-21 receptor agonists and antagonists for
    treating transplant rejection, autoimmune diseases, cancers and
    infections
Tumor necrosis factors... Interleukin 12... Interleukin 15... Interleukin
17... Interleukin 18...
    agonists and antagonists; interleukin-21 receptor agonists and
    antagonists for treating transplant rejection, autoimmune diseases,
    cancers and infections
Spinal column, disease...
    ankylosing spondylitis; interleukin-21 receptor agonists and
    antagonists for treating transplant rejection, autoimmune diseases,
    cancers and infections
CD4 (antigen) ... CD22 (antigen) ...
    antibodies; interleukin-21 receptor agonists and antagonists for
    treating transplant rejection, autoimmune diseases, cancers and
    infections
Cytotoxic agents...
    antimetabolites; interleukin-21 receptor agonists and antagonists for
    treating transplant rejection, autoimmune diseases, cancers and
    infections
Dermatitis...
    atopic; interleukin-21 receptor agonists and antagonists for treating
    transplant rejection, autoimmune diseases, cancers and infections
Thyroid gland, disease...
    autoimmune thyroiditis; interleukin-21 receptor agonists and
   antagonists for treating transplant rejection, autoimmune diseases,
```

cancers and infections

Immunoglobulins...

A1; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections Immunoglobulins...

A2; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections Infection...

bacterial; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Estrogen receptors...

.beta. agonist; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Drug delivery systems...

carriers; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections Antibodies...

chimeric; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections Intestine, disease...

Crohn's; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections Immunoglobulins...

D; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections B cell(lymphocyte)...

depletion; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Immunoglobulins...

E; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections Lymphocyte...

effector cell; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Protein motifs...

extracellular domain; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Immunoglobulins...

fragments; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Immunoglobulins...

G; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections Immunoglobulins...

G1; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections Immunoglobulins...

G2; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections Immunoglobulins...

G2a; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections Immunoglobulins...

G3; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections Immunoglobulins...

G4; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections Antibodies...

humanized; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Disease, animal...

immune cell-assocd.; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Drug delivery systems...

immunoconjugates; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Drug delivery systems...

immunotoxins; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Intestine, disease...

inflammatory; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Cytokines... Enzymes, biological studies...

inhibitors; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Diabetes mellitus...

insulin-dependent; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Immunosuppressants... Lymphocyte... T cell(lymphocyte)... CD4-positive T cell... CD8-positive T cell... B cell(lymphocyte)... Macrophage... Megakaryocyte... Transplant rejection... Autoimmune disease... Antigens... Vaccines... Immunostimulants... Antitumor agents... Infection... Parasite ... Immunotherapy... Multiple sclerosis... Arthritis... Rheumatoid arthritis... Myasthenia gravis... Dermatitis... Eczema... Psoriasis... Asthma... Allergy... Antibodies... Immunoglobulins... Toxins... Radionuclides, biological studies... Lymphoma... Leukemia... Parasitic worm ... Bacterium(genus)... Drugs... Growth inhibitors, animal... Anti-inflammatory agents... Cytotoxic agents... Human... Fusion proteins(chimeric proteins)... Osteoarthritis... Mammalia... Immunoglobulin receptors... Molecular cloning... DNA sequences... Protein sequences... Protozoa... Genetic vectors... Animal tissue culture... Immunoglobulin receptors...

interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections Rheumatoid arthritis...

juvenile; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections Immunoglobulins...

M; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections Honeybee...

mellitin signal peptide from; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

T cell(lymphocyte)...

memory; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections Antibodies...

monoclonal; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Mouse... Rodentia...

MU-1; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections Lymphocyte...

natural killer cell; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

### Antibodies...

neutralizing; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

# Transcription factors...

NF-.kappa.B (nuclear factor of .kappa. light chain gene enhancer in B-cells), inhibitors; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cance

Anti-inflammatory agents...
nonsteroidal; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

### Selectins...

P-, inhibitors; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and

## Glycoproteins...

PSGL-1 (P-selectin glycoprotein ligand-1), inhibitors; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

### Arthritis...

psoriatic arthritis; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

### Proteins...

p38, inhibitors; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Tumor necrosis factor receptors...

p55 and p75; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Connective tissue, disease...

scleroderma; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

# Molecules...

small; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections Animal tissue, disease...

soft, neoplasm; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

# Neoplasm...

solid; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections Lupus erythematosus...

systemic; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections Vaccines...

tumor; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections Antigens...

tumor-assocd.; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

### Antigens...

tumor-assocd., RAGE; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

Antitumor agents...

vaccines; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections Blood vessel, disease...

vasculitis; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

## Infection...

- viral; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections Interleukins... Interleukin receptors...
- 21; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections Interleukins...
  - 22; agonists and antagonists; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

## CAS REGISTRY NUMBERS:

- 434283-61-1 amino acid sequence, signal peptide, included in fusion protein; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections
- 510729-85-8 amino acid sequence, STAT docking site, STAT5; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections
- 510788-28-0P 510787-86-7P 510788-32-6P 510788-34-8P 510788-36-0P 510788-38-2P 510788-40-6P 510788-42-8P 510788-44-0P amino acid sequence; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections
- 329900-75-6 9001-84-7 inhibitors; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections
- 59-05-2 75706-12-6 53123-88-9 162635-04-3 83869-56-1 185243-69-0 140281-74-9 interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections
- 510787-85-6P 510788-27-9P 510788-31-5P 510788-33-7P 510788-35-9P 510788-37-1P 510788-39-3P 510788-41-7P 510788-43-9P nucleotide sequence; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections
- 510787-80-1DP 510787-84-5DP 510787-82-3DP subfragments are claimed, amino acid sequence; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections
- 510786-18-2DP 510787-83-4DP 510787-81-2DP subfragments are claimed, nucleotide sequence; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections
- 510792-63-9 510792-64-0 510792-65-1 510792-70-8 510792-71-9 510792-72-0 510792-73-1 510792-74-2 510792-75-3 510792-78-6 510792-79-7 510792-80-0 unclaimed nucleotide sequence; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections
- 510792-62-8 510792-66-2 510792-76-4 219312-69-3 138831-86-4 unclaimed protein sequence; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections
- 510792-81-1 510792-82-2 unclaimed sequence; interleukin-21 receptor agonists and antagonists for treating transplant rejection, autoimmune diseases, cancers and infections

14/7/9 (Item 3 from file: 399) DIALOG(R)File 399:CA SEARCH(R)

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136166068
               CA: 136(11)166068e
                                     PATENT
  Human T cell inducible factors, interleukin-21, sequences, chromosomal
mapping, and function studies
  INVENTOR (AUTHOR): Dumoutier, Laure; Renauld, Jean-Christophe
  LOCATION: USA
  ASSIGNEE: Ludwig Institute for Cancer Research
  PATENT: PCT International; WO 200210393 A2 DATE: 20020207
  APPLICATION: WO 2001US20485 (20010627) *US 626617 (20000727)
  PAGES: 64 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C12N-015/24A;
C12N-015/63B; C07K-014/54B; G01N-033/50B DESIGNATED COUNTRIES: AU; BR; CA;
CN; JP DESIGNATED REGIONAL: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE
; IT; LU; MC; NL; PT; SE; TR
  SECTION:
CA215005 Immunochemistry
  IDENTIFIERS: sequence interleukin 21 gene human, transcription factor
STAT induction IL21 human mouse, activation transcription interleukin 21
  DESCRIPTORS:
Transcriptional regulation...
    activation; human T cell inducible factors, interleukin-21, sequences,
    chromosomal mapping, and function studies
Proteins...
    acute-phase, induction of; human T cell inducible factors,
    interleukin-21, sequences, chromosomal mapping, and function studies
Gene, animal...
    encoding IL-21; human T cell inducible factors, interleukin-21,
    sequences, chromosomal mapping, and function studies
Thymus gland... Brain...
    expression of IL-21 in mouse; human T cell inducible factors,
    interleukin-21, sequences, chromosomal mapping, and function studies
B cell(lymphocyte)...
    expression of IL-21 in; human T cell inducible factors, interleukin-21,
    sequences, chromosomal mapping, and function studies
T cell(lymphocyte)...
    helper cell, IL-9 upregulated Il-21 in; human T cell inducible factors,
   interleukin-21, sequences, chromosomal mapping, and function studies
Liver...
    hepatocyte; human T cell inducible factors, interleukin-21, sequences,
    chromosomal mapping, and function studies
Liver, neoplasm...
    hepatoma, induction of STAT in; human T cell inducible factors,
    interleukin-21, sequences, chromosomal mapping, and function studies
Human... cDNA sequences... DNA sequences... Genetic mapping... Mammalia...
Drug screening... Mouse...
    human T cell inducible factors, interleukin-21, sequences, chromosomal
    mapping, and function studies
Chromosome...
    human 12, q15; human T cell inducible factors, interleukin-21,
    sequences, chromosomal mapping, and function studies
Mast cell...
    IL-9 upregulated Il-21 in; human T cell inducible factors,
    interleukin-21, sequences, chromosomal mapping, and function studies
Lipopolysaccharides...
    induction of IL-21 with; human T cell inducible factors,
    interleukin-21, sequences, chromosomal mapping, and function studies
Haptoglobin...
    induction of; human T cell inducible factors, interleukin-21,
    sequences, chromosomal mapping, and function studies
    mesangium, melanoam, induction of STAT in; human T cell inducible
    factors, interleukin-21, sequences, chromosomal mapping, and function
    studies
Nerve...
    neuron, melanoam, induction of STAT in; human T cell inducible factors,
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interleukin-21, sequences, chromosomal mapping, and function studies
Antibodies...
    of IL-10R.beta.; human T cell inducible factors, interleukin-21,
    sequences, chromosomal mapping, and function studies
Interleukin 10...
    R.beta.; human T cell inducible factors, interleukin-21, sequences,
    chromosomal mapping, and function studies
Proteins...
    SAA (serum amyloid A), induction of; human T cell inducible factors,
    interleukin-21, sequences, chromosomal mapping, and function studies
Transcription factors...
    STAT, induction of; human T cell inducible factors, interleukin-21,
    sequences, chromosomal mapping, and function studies
Transcription factors...
    STAT1, induction of; human T cell inducible factors, interleukin-21,
    sequences, chromosomal mapping, and function studies
Transcription factors...
    STAT3, induction of; human T cell inducible factors, interleukin-21,
    sequences, chromosomal mapping, and function studies
Transcription factors...
    STAT5, induction of; human T cell inducible factors, interleukin-21,
    sequences, chromosomal mapping, and function studies
Interleukin 4...
    upregulation of IL-21 in TS1 cell with; human T cell inducible factors,
    interleukin-21, sequences, chromosomal mapping, and function studies
Interleukin 9...
    upregulation of IL-21 with; human T cell inducible factors,
    interleukin-21, sequences, chromosomal mapping, and function studies
Interleukins...
    21.alpha.; human T cell inducible factors, interleukin-21, sequences,
    chromosomal mapping, and function studies
Interleukins...
    21.beta.; human T cell inducible factors, interleukin-21, sequences,
    chromosomal mapping, and function studies
Interleukins...
    21; human T cell inducible factors, interleukin-21, sequences,
    chromosomal mapping, and function studies
  CAS REGISTRY NUMBERS:
9004-07-3 .alpha.1-chymotrypsin, induction of; human T cell inducible
    factors, interleukin-21, sequences, chromosomal mapping, and function
    studies
394754-56-4 394754-57-5 nucleotide sequence; human T cell inducible
    factors, interleukin-21, sequences, chromosomal mapping, and function
    studies
394754-66-6 394754-67-7 394754-68-8 394754-69-9 394754-70-2
    394754-71-3 394754-72-4 394754-73-5 394754-74-6 394754-75-7
    394754-76-8 394754-77-9 394754-78-0 394754-79-1 394754-80-4
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    394754 - 86 - 0 \quad 394754 - 87 - 1 \quad 394754 - 88 - 2 \quad 394754 - 89 - 3 \quad 394754 - 90 - 6
    394754 - 91 - 7 \quad 394754 - 92 - 8 \quad 394754 - 93 - 9 \quad 394754 - 94 - 0 \quad 394754 - 95 - 1
    394754-96-2 394754-97-3 394754-98-4 394754-99-5 394755-02-3
    unclaimed nucleotide sequence; human T cell inducible factors,
    interleukin-21, sequences, chromosomal mapping, and function studies
394755-00-1 394755-01-2 394755-03-4 unclaimed protein sequence; human T
    cell inducible factors, interleukin-21, sequences, chromosomal mapping,
    and function studies
11028-71-0 upregulation of IL-2 with; human T cell inducible factors,
    interleukin-21, sequences, chromosomal mapping, and function studies
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14/7/10 (Item 4 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)
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135271906
              CA: 135(19)271906d
                                     PATENT
  Human interleukin-21 and -22 and cDNAs and their use in diagnosis and
  INVENTOR (AUTHOR): Ebner, Reinhard; Ruben, Steven M.
  LOCATION: USA
  PATENT: U.S. Pat. Appl. Publ. ; US 20010023070 A1 DATE: 20010920
  APPLICATION: US 731816 (20001208) *US PV87340 (19980529) *US PV131965
(19990430) *US 320713 (19990527) *WO 99US11644 (19990527) *US PV169837
(19991209)
  PAGES: 87 pp., Cont.-in-part of U.S. Ser. No. 320,713. CODEN: USXXCO
  LANGUAGE: English CLASS: 435069500; C12P-021/02A; C12Q-001/68B;
G01N-033/53B; C07H-021/04B; C12N-005/06B
  SECTION:
CA215005 Immunochemistry
CA201XXX Pharmacology
CA203XXX Biochemical Genetics
  IDENTIFIERS: sequence human interleukin 21 22 cDNA
  DESCRIPTORS:
Gene, animal...
    for interleukins-21 or -22; human interleukin-21 and -22 and cDNAs and
    their use in diagnosis and therapy
Protein sequences... cDNA sequences...
    human interleukin-21 and -22 and cDNAs and their use in diagnosis and
    therapy
Interleukins...
    interleukin-21; human interleukin-21 and -22 and cDNAs and their use in
    diagnosis and therapy
Interleukins...
    interleukin-22; human interleukin-21 and -22 and cDNAs and their use in
    diagnosis and therapy
Molecular cloning ...
    of interleukin-21 and -22 nucleic acids; human interleukin-21 and -22
    and cDNAs and their use in diagnosis and therapy
Antibodies...
    to interleukins-21 and -22; human interleukin-21 and -22 and cDNAs and
    their use in diagnosis and therapy
  CAS REGISTRY NUMBERS:
251639-93-7P 251639-95-9P 251100-02-4P amino acid sequence; human
    interleukin-21 and -22 and cDNAs and their use in diagnosis and therapy
251639-73-3 interleukin 21 domain I-encoding cDNA; human interleukin-21
    and -22 and cDNAs and their use in diagnosis and therapy
251639-74-4 interleukin 21 domain II-encoding cDNA; human interleukin-21
   and -22 and cDNAs and their use in diagnosis and therapy
251639-80-2 interleukin 21 domain III-encoding cDNA; human interleukin-21
   and -22 and cDNAs and their use in diagnosis and therapy
251639-81-3 interleukin 21 domain IV-encoding cDNA; human interleukin-21
   and -22 and cDNAs and their use in diagnosis and therapy
251639-86-8 interleukin 21 domain V-encoding cDNA; human interleukin-21
    and -22 and cDNAs and their use in diagnosis and therapy
251639-87-9 interleukin 21 domain VI-encoding cDNA; human interleukin-21
    and -22 and cDNAs and their use in diagnosis and therapy
251639-88-0 interleukin 21 domain VII-encoding cDNA; human interleukin-21
   and -22 and cDNAs and their use in diagnosis and therapy
251639-82-4 interleukin 22 domain I-encoding cDNA; human interleukin-21
   and -22 and cDNAs and their use in diagnosis and therapy
251639-83-5 interleukin 22 domain II-encoding cDNA; human interleukin-21
   and -22 and cDNAs and their use in diagnosis and therapy
251639-84-6 interleukin 22 domain III-encoding cDNA; human interleukin-21
    and -22 and cDNAs and their use in diagnosis and therapy
251639-85-7 interleukin 22 domain IV-encoding cDNA; human interleukin-21
    and -22 and cDNAs and their use in diagnosis and therapy
251639-89-1 251639-94-8 251639-97-1 nucleotide sequence; human
    interleukin-21 and -22 and cDNAs and their use in diagnosis and therapy
169109-62-0 181380-11-0 251662-03-0 251662-04-1 251662-20-1
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251662-26-7 362647-78-7 362677-50-7 133198-29-5 215663-51-7 244008-08-0 244008-09-1 244008-12-6 244008-13-7 unclaimed sequence; human interleukin-21 and -22 and cDNAs and their use in diagnosis and therapy

therapy
251662-46-1 251662-45-0 Unclaimed; human interleukin-21 and -22 and cDNAs and their use in diagnosis and therapy

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S3	13	RD S2 (unique items)
S4	7377	(T(W)CELL(W)INDUCIBLE OR TIF?)
S5	7	(T(W)CELL(W)INDUCIBLE(W)FACTOR?)
S6	5	RD S5 (unique items)
S7	132	IL(W)21
S8	73	RD S7 (unique items)
S9	13	S8 AND PY<2000
S10	13	RD S9 (unique items)
S11	141	INTERLEUKIN(W)21
S12	75	RD S11 (unique items)
S13	10	INTERLEUKIN (W) 21 (20N) (NUCLEIC OR DNA)
S14	10	RD S13 (unique items)
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